The Listener

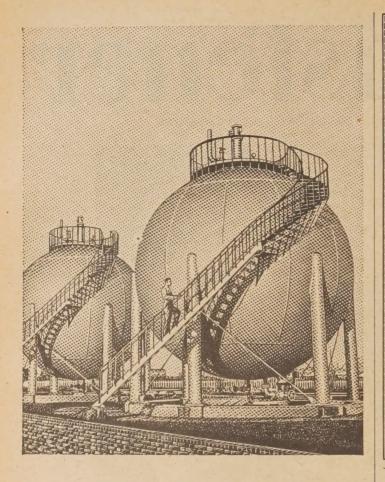
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Sir Max Beerbohm, who will be eighty on Sunday: a photograph taken at his home in Rapallo

In this number:

Are There Eternal Truths? (Sir Edmund Whittaker)
Nature and the National Parks (Brunsdon Yapp)
On Human Love (Rev. M. C. D'Arcy, S.J.)



GLOBAL OPERATIONS

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The Listener

Vol. XLVIII. No. 1225

(Sir Arthur Grimble)

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Thursday August 21 1952

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Are There Eternal Truths?

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By SIR EDMUND WHITTAKER

DISTINGUISHED American professor has recently published a book in which he proposes, to use his own words, 'a conception of knowledge which does away with all claims to eternal truth'. I want to examine the question as to whether eternal truths exist or not, particularly in the light of what is called Eddington's Principle. Let us first notice some facts which seem to support the professor's thesis. One might hastily suppose that plenty of eternal truths have been revealed to us by modern science: for scientific statements are generally presented as being true for all times and places, and as being supported by such direct and overwhelming evidence that to doubt them is impossible. But to see whether this belief is well founded, let us turn to the history of science.

Fifty years ago, everyone thought that the surest fact in all science was Newton's law of gravitation. This law, originally proposed in the seventeenth century, was used throughout the eighteenth and nineteenth centuries to predict by mathematical calculations the places of the heavenly bodies; and it yielded the most accurate predictions conceivable in thousands of cases, extending, when old observations were taken into account, over thousands of years. It seemed that nothing more convincing could be imagined. Yet in 1915 Einstein published a law of gravitation different from Newton's, which in nearly all cases gave the same predictions to within the degree of accuracy of the observations: and for certain reasons Einstein's law soon came to be regarded as better than Newton's, and superseded it. Quite lately it has been shown that another law, which also gives predictions agreeing closely with observations, has some possible advantages over Einstein's. The net result of hundreds of years of investigation is that we have theories yielding formulae that represent the observed facts of gravitation very nearly, but we cannot be certain that any one of the theories is absolutely right. We can construct an approximation, but we have not yet found anything in this connection that can properly be described as eternal truth.

A similar conclusion follows from the history of another fundamental problem of science, namely, the question as to the nature of light. At the beginning of this century, it seemed certain that light is essentially

a wave-motion, propagated in a medium called the aether. Then new facts were discovered which seemed to show that the aether does not exist, and that some of the properties of light are not such as could be possessed by a wave-motion. Opinion has now in some degree changed, for a few months ago Professor Dirac of Cambridge expressed his belief that the concept of the aether has a meaning and, indeed, that it is a necessity for physics. Here, again, we know formulae that give excellent agreement with observation, but we have to remember that all observation is only approximate, and we cannot claim in this domain of investigation to have reached as yet a final and eternal truth.

Another instance of the overthrow of what had long been accepted as certain scientific fact is afforded by the story of hydrogen. It was found in 1927 that ordinary hydrogen gas is not a single substance, as everyone had previously understood it to be, but is a mixture of two gases now called ortho-hydrogen and para-hydrogen; these differ their physical properties, such as specific heat and boiling-point, but are identical in their chemical properties, which explains why the chemists had for so long failed to distinguish them. To take yet another example from the history of chemistry: when I was a boy I was taught that the atmosphere is composed of nitrogen, oxygen, carbon dioxide, and water vapour. But now we know that the so-called nitrogen of the atmosphere was not pure nitrogen at all, but a mixture of nitrogen with no less than five previously unknown elements.

It might seem, then, that the assertions of science have only a provisional character, and that the American professor was justified, at any rate as far as science is concerned, in asserting that there are no such things as eternal truths. But the question as to whether we possess eternal truths here and now is quite different from the question as to whether eternal truths exist. The laws of nature that have been proposed hitherto are subject to revision, and are therefore imperfect; but every man of science believes that they are approximations to a system of laws of nature which really are eternal truths: the fact that we have not yet completely discovered them does not shake our belief that they exist.

My argument, so far, would seem to point to the conclusion that

eternal truths do exist, but that they exist only as the limit of an infinite process of approximation, whose ultimate products we cannot now anticipate. I want to show that this conclusion is untrue: there is a certain principle called Eddington's Principle, first enunciated by Arthur Stanley Eddington, Professor of Astronomy at Cambridge, who died in 1944; and from Eddington's Principle it can be inferred that some eternal truths can be obtained in complete perfection here

Eddington's Principle depends on a distinction which he drew between two kinds of assertion that may be made in physics. On the one hand, we may have assertions that something has a numerical value: that is, assertions such as 'the masses of the electron and the proton are approximately in the ratio 1 to 1836': Such assertions may be called *quantitative*. On the other hand, we may have statements such as 'a material body which occupies a certain space can occupy a different space without being changed in its properties'; or 'the velocity of light is independent of the motion of its source'. Neither of these statements mentions any particular number: assertions that do not mention numbers may be called *qualitative* assertions.

Eddington's Principle

Eddington's Principle depends on this distinction between quantitative and qualitative assertions. It may be stated thus: All the quantitative propositions of physics, that is, the exact values of the pure numbers that occur inevitably in physics, may be deduced by logical reasoning from qualitative assertions, without making use of quantitative data derived from observation. The point is, that the numbers furnished by Eddington's Principle will not be approximations, like the numbers derived from observation, but will be exact: and that is a vital difference.

I am reminded of the adventures of a friend of mine who, after taking a high place as a Wrangler in the Cambridge Mathematical Tripos, decided that he would then like to take the Natural Sciences Tripos. As he had never done any physics at school, he had to begin that subject at the beginning; and for his first experiment was asked to determine π , the ratio of the circumference of a circle to its diameter, by cutting out a circle, and also a square whose side was equal to the radius of the circle, in some kind of sheet metal, and then weighing them. He told the demonstrator that mathematicians had much better ways of determining π than this, and, indeed, they could calculate it to hundreds of places of decimals, whereas any value obtained by weighing sheet metal would be of very limited reliability. This well-known fact is actually an example of Eddington's Principle: from purely qualitative assumptions, namely the axioms of Euclidean geometry, it is possible to obtain the quantitative value π to any degree of accuracy. This character of absolute precision, which applies to all the numbers found by Eddington's Principle, gives us grounds for expecting that the Principle will furnish some eternal truths.

As an illustration of the Principle, I will describe the history of one particular number found by Eddington-a number which is so important that we may without exaggeration speak of it as lying at the basis of physics. Its existence was first suspected, and its approximate value determined, from observational and experimental results, which must first be described. There are certain numbers which present themselves naturally in the study of the physical world: for instance, the ratio of the mass of a proton to the mass of an electron. When all the known numbers of this kind are collected and examined, they are found to have a curious property: they are not scattered at random over the whole range of numbers, but are crowded into three compact groups. First, there are numbers less than 1900; then there is an enormous gap until we come to numbers of the order 1039, that is, numbers which require forty digits for their expression; and then there is another enormous gap until we come to numbers of the order 1078, that is, numbers which require seventy-nine digits. This distribution is so obviously not accidental that it must be accepted as part of the order of nature. And the question arises, does it hold not merely now but for all time?

This question began to be answered when Eddington noticed the arithmetical fact that 10⁷⁸ is the square of 10³⁹; and he divined that the whole system of nature is built round a number of the order 10⁷⁸, which he called the *cosmical number*. Thus he was able to explain the crowding of the physical numbers into three groups: those of order 10⁷⁸ are those that contain the cosmical number as a factor: those of order 10³⁰ contain the square root of the cosmical number as a factor: and those between 1 and 1900 are those that do not involve the cosmical number at all. The cosmical number is evidently of paramount import-

ance in the structure of the universe. The question is, what does this cosmical number represent? And would the fact of its existence, coupled with precise knowledge of its value, constitute an eternal truth?

Eddington found its precise value, as an application of his Principle, and he found that this value is actually of the order 10⁷⁸, and is unchangeable in time. In terms of it he expressed all the physical

numbers that are of the orders 1039 and 1078.

The permanence in time of the cosmical number was, however, challenged in 1938 by Dirac. He remarked that if the generally accepted value of the age of the universe is expressed in terms of a unit of time depending on numbers that occur in atomic theory, we obtain a number of the order 10³⁹, that is, a number which looks as if it must involve the square root of the cosmical number as a factor. From this he inferred that the cosmical number is not an absolute number, permanent in time, but that it increases as the world grows older, being in fact proportional at any instant to the square of the age of the universe at that moment; and this led him to conclude that many, or perhaps all, of the physical numbers that are at present of the order 10³⁹ or 10⁷⁸ are actually variable in time, increasing proportionally to the age of the universe or to its square.

This, however, seemed to involve a startling consequence. One of the numbers of the 10⁷⁸ group is what we may call roughly the number of particles in the universe: to be more precise, it is the ratio of the estimated mass of the universe to the mass of a hydrogen atom. Ought we to infer that this number is always increasing? Dirac hesitated to apply his ideas to this case, and he retained the principle that the quantity of matter in the world is unchanging in time. Jordan, however, carried out Dirac's ideas consistently, and asserted that the total mass of the universe must be increasing. This was a very radical innovation in physical theory: for since mass is equivalent to energy, it seemed to imply that the total amount of energy in the universe is always increasing, and thus to contradict the principle of the conservation of energy. This was felt to be a very serious difficulty: though Jordan succeeded in devising a proposal to overcome it. The suggestion of Jordan, or, as it is now generally called, the hypothesis of continuous creation, is fundamental in many modern cosmologies which are in other respects quite different from Jordan's and which have attracted much wellmerited attention in recent years.

As an aside, I may remark that the different cosmologies offer a wide variety of alternatives. So far as I know, however, nobody has yet proposed a cosmology based on the assumption that the total amount of matter in the universe is continually diminishing. This would have the recommendation of supplying a very simple picture of the final destiny of the universe. The world as we know it would end by just fading away until there was nothing left.

The Cosmical Number

To return to Eddington, whether we accept his interpretation of the cosmical number or not, I think we are compelled to believe that there is a number, at present of the order 10^{78} , which is fundamental in relation to the structure of the universe. The question is whether, with Eddington, we believe this number to be unchanging in time, and so to lead to the expression of an eternal truth, or whether, with Dirac and Jordan, we believe it to be increasing as the universe grows older. If we believe it to be increasing, then we must believe that all the physical numbers of the orders 1039 and 1078 are increasing; and this necessitates the beliefs, first, that the total amount of matter in the universe is increasing, and, secondly, that the strength of gravitation is decreasing: these two beliefs involve the same cosmical number and cannot be separated. With regard to the amount of matter in the universe, there is no direct observational evidence one way or the other, and it is difficult to imagine a method by which such evidence could ever be obtained; but with regard to the strength of gravitation, we are in a more fortunate position.

The possibility of being able to decide whether the strength of gravitation is increasing or decreasing, or is invariable, is based on the circumstance that there is a well-known relation which connects the masses of the stars with their luminosities, and which happens to involve the strength of gravitation. Dr. Teller of the University of Chicago has applied this mass-luminosity relation to our sun, and has examined his results in the light of the fact that a reasonably steady temperature must have been required for the existence of life on the earth during some hundreds of millions of years. In this way he was led to the conclusion that the strength of gravitation is unlikely to have

(continued on page 302)

Nature and the National Parks

By BRUNSDON YAPP

THEN, from time to time, correspondence appears in the press about National Parks, or power schemes in the mountains, or the raising of a lake surface to provide more drinking water, it is almost always expressed in emotional

terms. I believe that a rational approach can tead to a method of use of our mountain districts which will preserve and even magnify their beauty and, at the same time, increase the sum total of human happiness. Let me say at once that I spend most of my holidays on the hills, and so am wholeheartedly with those who want them kept as places of solitude, recreation, and inspiration. I shall speak chiefly of the Lake District, which I know best, but most of what I shall say applies, with necessary modifications, to much of Wales and to the Highlands of Scotland. In all three places recent schemes for making or raising lakes, as, for example, in Ennerdale, Snowdonia, and Rannoch, have caused battles between the two sides, and in all three the work of the Forestry Commission is a constant source of controversy.

The best way of looking at the question is the historical, and to that there are two aspects. If we consider first man's reaction to natural beauty, we shall find that our present attitude is not very ancient, and we may well suspect that it is neither final nor perfect. We inherit from our ancestors not only, as I shall show you later on, much of the present appearance of the hills, but also our interest in them, and both have undergone, and are continually undergoing, changes. It seems likely that those who work long hours in the midst of natural beauty seldom have much feeling for its value, and, in fact, among the mountains the worker in the field is more likely to be oppressed by their malignancy, which brings rain and late frosts and snow

to aggravate the hardships of poor soil and stony ground. It seems that, in general, it was not until there was a class that was both leisured and educated that beauty became something that was written about and assessed in comparative terms, and such a class did not exist until the eighteenth century. The Captain, the Lieutenant, and the Ancient of Norwich, who toured England in 1634, had no use for the Lake District.

By the second half of the eighteenth century things had changed. The first hotel built specially for tourists was put up at Ousebridge by Mr. Spedding in about 1760, and within fifty years there were several competing guidebooks, as well as books of travel. These show a much



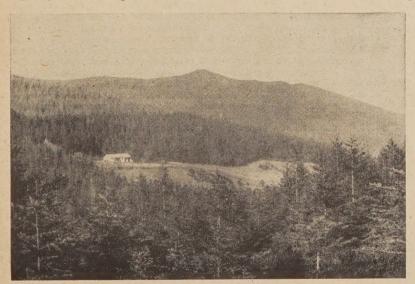
Loch Morlich from the slopes of Cairngorm

Robert M Adam

more critical spirit than is generally found today, but the most important difference is that the Lake District was taken not as something perfect in itself and not to be altered, but as a fine background with which the landscape gardener on a grand scale could do much; as a site, in fact, with great capability of improvement. This word 'improvement' was on everybody's lips. It included all kinds of human activity, from enclosing

and ploughing to diverting a stream or planting a clump of trees to break the view. The unimproved mountains were generally described as 'horrid', a word which, though it had not then acquired its present pejorative meaning, at least did not imply beauty. Nor were all mountains, or all lakes, accepted as beautiful.

The second historical aspect is the ecological. How far is the present appearance of the mountains permanent, and in particular how far is it due to human action? To take the lesser point first, there is plenty of documentary evidence that the present detailed aspect of the hills is due to the planning and planting of the eighteenth century followed by the neglect of the nineteenth. We know, for instance, that the wood on the south side of Ennerdale Water was cleared in about 1790. For Derwentwater we have more precise information. The woods of the Ratcliff estates on the Keswick side, which were then vested in the Trustees of Greenwich Hospital, were felled in 1747 and the next few years, and between 1759 and the end of the century much replanting took place. Before the sale of timber a survey showed that the woods contained in round figures, 7,000 oaks, 5,000 ashes, and 3,000 other trees, probably largely birches. The planting proportions were quite different. Oak was again the chief tree, with over 8,000 sown, but there were only 3,000 ashes; instead,



Part of one of the Forestry Commission's plantations in the Lake District

1,000 beeches, 6,000 larches and 3,000 Scotch firs, all trees quite new to the dale, were put in. Moreover, trees were planted where they did not grow before, for example on Friar's Crag, where the Ruskin memorial now is. All this means that the appearance of Derwentwater was totally changed in the eighteenth century, and that the foreground and middle distance of the celebrated Surprise View are as surely manmade as, shall we say, that from King's Bridge on the Cambridge Backs.

Reduction in Cumberland's Standing Timber

If we go to earlier times, it is certain, both on general botanical grounds and from scattered printed-references, that the dales were at one time much more thickly wooded. The timber merchants of Whitehaven, giving evidence before a committee of the House of Commons in 1771, estimated that the standing timber of Cumberland had been reduced by seven-eighths in the previous forty years. The German miners of Elizabethan Keswick had to buy their wood from as far as twenty miles away. Many place names suggest woodlands up to 1,000 feet or more, and the archaeological findings agree with this. It is probable, though this is not quite certain, that there has been another change as well: the replacement of heather by grassland through grazing by sheep. Further, it is likely that to a great extent man has merely accelerated a natural process. The woods in time would have killed themselves (some of those that are left seem not to be regenerating), though probably after some years they might have grown again, and the accumulation of peat and removal of minerals from the soil would lead to other changes. Finally, the vegetation has been affected, and no doubt will be in the future, by slow secular changes of climate.

With this knowledge we ought not to be romantic about the hills. Their present appearance is in large part an accident: in so far as it is natural it is certainly not going to remain the same for long, and there is no reason for thinking it perfect. Some changes we can be certain would be for the worse. A railway up Skiddaw, or a factory at the head of Derwentwater, would certainly not increase their beauty, but even these ought not, on that ground, to be condemned outright. We have enough mountains to be able to make access to some of them easy, and I do not in the least regret the Snowdon railway; it enables those who could not otherwise climb the mountain to do so, and there is no evidence that the power of appreciating beauty is exclusively correlated with physical prowess. Let the young and active go by Crib Goch or Liwydd, and not grudge their elders the easy way. The same applies to motor roads; too many of them would destroy the beauty to which they give access, so let us have them few but good.

Two of the main 'threats' to the beauty of the mountains are generally said to be the damming of lakes for power or drinking water, and the activities of the Forestry Commission. It seems odd that in a country where much of the characteristic appearance is due to the existence of natural expanses of standing water, the making of bigger lakes, or new lakes, should be considered uniformly a bad thing. No doubt flat sheets of water can be dull, or even plain, in the sense in which that word is applied to a woman's face; the Round Pond in Kensington Gardens might be so described; but water in a dale can hardly be other than interesting, and may well be an embellishment. One may regret the loss of the village of Mardale, but the present head of Haweswater, since the level of the lake was raised to supply water to Manchester, is, in my view, finer than the old. Although the necessary dam is perhaps out of place, it is from most points of view invisible. There was recently much fuss about a suggestion to raise the level of Ennerdale Water, and one well-known journalist-don protested in a literary weekly that to do so would mean building a straight and ugly wall across the lower end of the lake. If he had ever walked round Ennerdale Water it must have been with his head in the air, for there is already a dam round its lower end; not a straight line, and not an ugly one, but a dam all the same. A plea was thus being made for the preservation not of a natural feature but of a particular degree of human interference with nature.

The Forestry Commission is attacked on two grounds: for planting trees at all and for planting conifers in particular. I have already said that the present bare state of the Lake District fells is due to clearance, sheep farming, and neglect. Not so long ago there must have been trees in most places to well over 1,000 feet—perhaps to 1,500 feet over most of the area, for at this height there are still some fragments left. Conditions in North Wales and Scotland were probably similar, and in all three countries the chief tree was oak. If the Commission planted this it would merely be restoring the hills to something nearer their natural appearance. Whether trees or sheep are the more valuable products of

the fells is for statisticians to decide, but on grounds of naturalness and beauty the trees win. The case for conifers, which are often economically more valuable than oak, is not so clear. Some thousands of years ago, before historic times, the Lake District mountains, like those of Scotland, were covered with firs, at least in the regions above the oaks, and I do not think that any real objection can be made to the planting of this species. Much of the present beauty of Derwentwater is due to its firs, and the view from the Cairngorm of Loch Morlich surrounded by its pines is something which no other mountain area of Britain can equal. For walking, too, the forests of Speyside have a charm, especially in autumn, different from that of the deciduous woods. But the conifers which are chiefly planted are not firs, but foreign species such as larch and spruce. To most of these there is one very strong objection: that it is impossible to wander through them, as distinct from walking along planned rides. If, then, it is an essential of a National Park that the public shall be able to go freely everywhere, they cannot be allowed.

But, in fact, I do not think that some limited restriction of this sort is a very great hardship, provided that adequate open ground is left. If we concede that some restriction of access to plantations is as reasonable as restriction of access to ploughed fields, we are left with the question of beauty, and here emotion is strong. To many people these imported conifers are ugly, and there is an end to it. I think that such people are wrong, and I think one of the reasons why they hold this view is that they dislike anything which they conceive to be new. Larches are not native to our hills, even though they have been grown here for nearly 200 years, and in favourable places become self-sown, so it is felt that they must be out of place. This is mere prejudice. Many of the foothills are improved by any trees, even foreign ones, as becomes obvious when those formerly planted are clear felled, as happened in a number of places (such as the Keswick-facing slopes of Latrigg) during the war. Well-arranged plantations of larch, such as those of Wyre Forest in Worcestershire, with their heather-clad rides, are very pleasant places to walk in; and a point of some importance is that in April, when the migrants arrive, they hold a very much larger population of birds than do the oaks. Even spruce—which is not, in most of its plantations in this country, a pleasant tree because of its darkness and the density of its carpet of dead leaves-cannot be condemned outright by anyone who has walked in the forests of Sweden.

The Real Threats to Beauty

The conclusion of all this is that reasonable economic use of the natural potentialities of the hills, whether for wood or water, need not conflict with the development of National Parks, and may, indeed, lead to an increase in their beauty, as the planting of the eighteenth century undoubtedly did. The threat seems rather to come from those who would sterilise the mountains from any sort of change other than degeneration. This can be brought about in two ways. The military occupation of land does nothing but destroy, and is therefore objectionable, apart from the restriction of public access which it implies. There is plenty of open land in Scotland and, to some extent, in the Pennines and North Wales which is just ugly, and there ought to be plenty of room here for the necessary bombing ranges without their being put in places of outstanding beauty or interest. Perhaps even more dangerous, because less obvious, is the degeneration which must often follow attempts to maintain the status quo. Nature will not stand still, and efforts to prevent planting or to prevent felling will often end in the disappearance of that which one wants to preserve, and in the dominance of weeds. Attempts to maintain the present character of Borrowdale by preservation orders and prohibition of planting conifers are about as sensible as would be similar attempts to maintain the character of Kew Gardens, and are just as likely to be successful.

-From a talk in the Third Programme

A new book on birds which claims to enable anyone to identify the birds he sees 'simply by looking them up under the characteristics that meet the eye', is the Collins Pocket Guide to British Birds: The Complete Identification Book, by R. S. R. Fitter and R. A. Richardson (Collins, 21s.). It contains over 1,000 illustrations, 600 in colour. New additions to the revised 'Little Guides' are Worcestershire, by F. T. S. Houghton, revised by Matley Moore, and Essex, by C. Charles Cox, revised by C. Henry Warren (Methuen, 9s. 6d. each). Robert Hale has now added to 'The County Book' series Wales, by Maxwell Fraser in two volumes: Vol. 1, 'The Background', vol. 2, 'The Country'. The price is 18s. each. The latest addition to Collins' 'New Naturalist' library is An Angler's Entomology, by J. R. Harris. The price is 25s.

The Bonn and Paris Agreements-V

Germany's Part in Western Defence

RICHARD SCOTT gives the last talk in the series

OR the countries of the western world—the free world—these past two years have been a period of intensive diplomatic activity. And most of this activity has been directed towards a single aim—the aim of co-ordinating and integrating and strengthening the resources of the free world so that any attack made against it can be resisted and ultimately defeated. And it seems to me that today the western world is sitting back, taking a brief and well-earned rest after the completion of the principal pillars on which the joint programme of collective defence is going to rest, and before launching itself into the major work of filling in the superstructure. So this would seem to be a good moment to try to assess what has been achieved. But I want to confine myself here to a single aspect—and it is a vital aspect—of the problem of western defence: the problem of Germany and the part that Germany is going to play in this common effort.

Attitude of the U.S.A.

It was during the summer of 1950 that it first became apparent to the British and the French that there was a growing body of opinion in the United States which favoured the raising of a limited German military force. The French and British Governments consulted together and found themselves in agreement in opposing any German rearmament at that stage. However, when the question was raised by the United States in September that year, at a meeting of the North Atlantic Council in New York, Mr. Bevin, then Foreign Secretary, allowed himself to be convinced by the arguments of the Americans; and he changed his mind on the need for some German rearmament. He explained this change of policy to the House of Commons on his return from New York, Mr. Bevin said: 'If, unhappily, aggression were to take place in Europe we are satisfied that its defence would have to take place as far east as possible, and that means that western Germany must be involved; and if western Germany is to be defended, it seems to us only fair and reasonable that the people of western Germany should help in their own defence '.

There were, in fact, two very strong arguments with which the Americans had converted Mr. Bevin to their way of thinking on this question. The first was military. It was said that, according to the military experts, it would be virtually impossible to create an adequate defence of western Europe without a military contribution from Germany. The second argument was political. It was said that the American Congress and people could not be persuaded to allow the continued stationing of American troops in Europe unless they were satisfied that the western European countries were themselves all making their maximum military contribution towards their own defence. It was this second argument which carried most weight with Mr. Bevin; for he was concerned, perhaps above everything else, to encourage the Americans, by every legitimate means he could, to play an active part in Europe. I remember his pointing out at a private talk, a day or two after he had returned from this New York Atlantic Council meeting, that whereas the enormously valuable and generous aid Europe had received from the Americans under the Marshall Plan had not involved the United States directly in Europe, they were directly involved under the Atlantic Pact. He went on to say that he thought it was worth paying a very high price to ensure that the United States continued to be so involved through the presence of her troops in Europe. He did not like the idea of German rearmament, but he disliked even more the prospect of the Americans pulling out of Europe. So the British, for their part, agreed to discuss how German rearmament might be brought about.

The French Government, however, continued to adopt a much more negative attitude. That was hardly surprising. One does not need to be an expert on Franco-German relations since 1870 in order to understand this. But the French were not dogmatic or unrealistic about the question. They realised that it would not be possible to keep the Germans unarmed and defenceless for ever—that this would not even be desirable. But they hated the idea of seeing the Germans build up again a military force of their own which could once more be hurled

against France as it had been, three times, in the past seventy years. So the French Government conceived the idea of creating a European army composed of all the armed forces of the member countries in Europe. It was hoped in this way to enable the Germans to make their fullest contribution to western defence without running the risk of placing German military forces once again under the control of German Chiefs of Staff or a German Government. Sometimes I think we forget that the European army was conceived to solve this primarily political question of a German military contribution, and not because it was felt to offer the most effective means of organising the fighting forces of the participating countries.

Though only five other European countries agreed to join France in setting up a European army, the idea had the blessing of the British and the Americans, and the whole Atlantic Council agreed that if the six countries succeeded in their project, the question of the German contribution to western defence could be settled in this way. So in February 1951 the six powers began discussing how to build up their European army. Their representatives met almost continuously for over a year, and it was not until the end of May 1952, that the treaty setting up a European Defence Community was ready for signature. It is clear that for the past two years the planning of western defence under the North Atlantic Treaty Organisation has been based on the assumption of a German military contribution. If there is not going to be any contribution from Germany, these plans will fall to the ground and N.A.T.O. will have to start planning its resources and strategy all over again. That would obviously be a terrible set-back to western defence. But we shall not know whether we are going to get this German contribution until the E.D.C. treaty has been ratified: because if the treaty is not ratified, and the plans for a European army fall to the ground in consequence, there is no question of the Germans going ahead with the creation of purely national armed forces. That might have to be the ultimate solution, but it would certainly have to be considered at length by the Western Powers first, and their formal approval obtained. So the ratification debates in the six parliaments this autumn-and particularly those in Paris and Bonn—are going to be as important as any since the war.

The German Peace Contract

Closely linked with the E.D.C. treaty are the so-called German contractual agreements or German peace contract. Unless and until this too is ratified by the parliaments of Germany and the three occupying powers, the E.D.C. treaty cannot come into force. The contract became necessary because the Western Powers had realised that the conclusion of a peace treaty with the whole of Germany was highly unlikely for the time being. To get this treaty, prior agreement with Russia on German unity and the terms of the draft treaty would be necessary. And the endless four-power conferences had made no progress whatever on either subject and no progress seemed in sight. But the Western Powers were anxious to bring to an end their occupation regime, and the Germans, for their part, naturally demanded that if they were going to be asked to contribute to western defence they must be allowed to do so on a basis of full equality with the other countries. So it was decided to conclude a contract between the Western Powers and Germany which, as far as possible, would take the place of a peace treaty and restore to the Federal Government virtually complete independence.

This, then, is the main substance of the agreements: the replacement of the occupation regime by a whole series of new agreements establishing the relations of the three Western Powers with Germany on a civilian and allied basis instead of a military and occupation basis. This means, among other things, defining the status and rights of the armed forces of the three powers which will remain in Germany to defend instead of to occupy her. Here is one direct link between the contract and the E.D.C. treaty, since the French forces in Germany will be part of the European Defence Community. Another direct link is to be found in the financial clauses of the contract. These deter-

mine the division of the German financial contribution to western defence as between the cost of the Allied forces in Germany and the cost of the German divisions which are to be contributed to the E.D.C. It is clear that the contract and the E.D.C. treaty go together, and that each must be ratified or neither will come into effect.

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Britain is only directly concerned with the contract. She does not have to ratify the E.D.C. treaty because she is not a party to it. Though she gives her wholehearted support to the six countries which have decided to create a European army, she has taken the view that she cannot herself join it because of her considerable commitments outside Europe and, in particular, her special relations with the British Dominions. Another reason is the British unwillingness to join international organisations subject to a supranational authority. And the E.D.C. is to be subject to supranational control. However, as a practical, concrete indication of her support for E.D.C., Britain has agreed to conclude a treaty with the six powers, in which she guarantees to regard an attack on any one of them as an attack on herself and, in this event,

to bring all her military and other aid to their support. Britain is also linked directly with the E.D.C. through her membership of N.A.T.O. which has also given a reciprocal mutual security guarantee to the E.D.C. And on the practical level Britain intends to co-operate with the E.D.C. very closely. She has already said that her forces will be linked with those of the Community in matters of training, administration and supplies, and she has offered not only to receive individuals and formations of the E.D.C. forces to train with British formations in Germany and elsewhere, but also to lend officers and units to the European army. Even more important, perhaps, is the British suggestion that the air forces of the United Kingdom and the E.D.C. powers should be blended for operational training.

Britain has now taken all the necessary parliamentary action to give effect to the German contract, the Atlantic Treaty protocol linking N.A.T.O. with the E.D.C., and the Treaty guaranteeing Britain's support of E.D.C. It is now up to the parliaments of Paris and Bonn

and the four other E.D.C. members.—European Service

The Old Chief's Prayer

By PETER ABRAHAMS

HE earth sloped upward to a crest. To the left, across a deep valley, was a mountain peak; not high for this land of mountains. The heavy American car jerked and bumped across the uneven track. Behind us were other cars. And behind the cars, in little clusters in a long valley, were the small, round huts of the Masai. This was the land of the Masai, and apart from the chief who had come to welcome me on my arrival, this was my first sight of these tall, beautiful, and impressive people. The beauty of their women stirred my imagination to such a degree that Jomo Kenyatta, President of the Kenya African Union, mocked me gently all the way up the sloping track.

At last, the going became too steep and rough for even the powerful cars. We got out and forged ahead on foot. All about the track was wild land, unmastered by black or white man. The hot Kenya sun had grown gentle, for it was late afternoon. The sky was dazzlingly clear and distant. Except where the curve of the land interfered, space stretched away to the utmost limits of sight. The impression of bigness, perhaps the most forceful of all African impressions, was overwhelming.

Beside me, 'swinging freely, walked the eldest of our party of some twenty men, ex-Senior Chief Koinange, 'father' of the Kikuyu, and respected as an 'elder statesman' by most of the other tribes of Kenya.

It was at his home, Kiambaa, that I had, on the evening of my arrival, been welcomed by a room full of chiefs and elders of a number of tribes. The old chief was my host. He was small and spare, with an almost boyishly trim figure. His face was black, tinged slightly with red and brown. It gave off a vivid, living sheen, as ripe fruit sometimes does. It was an austere but tolerant face: the lips were not as full as African lips generally are; the outer rim of each ear had two small holes, and each lobe a large one, almost large enough to let a penny through. It was an almost classical face. Forget his colour and his pierced ears, sharpen the bridge of his nose, and you might be looking at the face of a Roman senator-philosopher. But it was the old chief's eyes that were, for me at any rate, most impressive. They were small, they were watery; they had a penetrating clarity and purity. And behind their purity was the sadness that comes with long life and knowledge.

Earlier on that same day this old man, one of his sons, Jomo Kenyatta, one or two others and I had gone into a Nairobi restaurant owned by an Indian. This was a place where whites, Indians, and certain selected Africans could eat. The management had no objection to either the old man or Kenyatta. But they objected to the old man's son and the others who were with us. So the others had gone. Kenyatta had seethed with bitter rage and expressed himself strongly.

'Why you and not them?' I had asked.

'It's a concession', Kenyatta had replied.

The old man had asked Kenyatta to translate our little exchange.

He had done so, still fuming. I had looked into the old man's eyes, then away, quickly. But he had seen my look and knew I had seen the utter sense of humiliation that incident had caused him. He had

put his hand over mine and spoken softly. Kenyatta had translated casually, not understanding what had passed between us. The old man said: 'That is our burden. We are either denied or they make us concessions. It is a heavy burden'.

Now, many hours later, I looked at the old chief as we neared the summit of the Ngong Hill. He said something and his face creased in a smile. I looked back for someone to interpret. But the nearest of the others was a good twenty yards behind. I myself was puffing furiously. Only the old man seemed unwinded, and he is near enough seventy as to make no difference. Better become teetotal like him, I told myself. How I wished I could talk to the old man! He would have been a young man when the first white men came. He might even be able to tell me of a time before the coming of the white man. If only we could sit down and I could ask questions and listen to his answers and get the unsaid things from the inflection of his voice and the expression of his eyes!

At last we reached the summit. I looked into a broad, flat-bottomed plain on the other side. It was dotted with short trees. I turned and looked back along the way we had come. Nairobi was far away, like a mirage in the heat-haze of the late afternoon sun. And somewhere to the right of it, lost in the mist of distance, was Mount Kenya, the sacred mountain. I turned to Kenyatta. He had written Facing Mount Kenya, the story of his people, and was most likely to answer my question.

'Why is Kenya a sacred mountain?'

'It just is', he said. 'It has always been. It goes too far back to

One of the young men translated for the old chief who nodded and said: 'Africa is old. Africa is very old. Older than the memory of man'.

'And your memory, father', I said, 'How far does it go back?' Oh damn the translator between us.

'A long way', he said.

'To before the coming of the white man?'

'Yes. Before them. I was a headman when they first came. I was leader of my clan. They met me as the leader of my clan. It was a long time ago'.

'Did you meet them in peace?' I asked.

'We welcomed them. We did not think they would take our land. We have shown you some of the land. They call it the White Highlands now. Once our cattle grazed there. Now they say no black man can own land there'.

We were back to the twin problems that are most dangerous in Kenya today: land and the colour bar. Before a genuine multi-racial community is created in Kenya these two problems must be resolved or they will undermine all the efforts both the Government and certain Africans are making for the education and betterment of the African people. Land and the colour bar are at the root of the growing bitter-

ness of the African Nationalists of Kenya today. The colour bar operates a little more subtly, perhaps, than it does in South Africa, but it is not subtle enough for those at the receiving end not to see and be tortured by it. In the Civil Service, I found, an African or Asian doing the same job as a European would get only three-fifths of the European's pay; while a European woman would get four-fifths. And, starting at Nairobi airport, the toilets have those hideous 'European', 'Asian', 'and 'African' notices. Whites have explained the reason for this to me: the various racial groups have differing personal habits, and if there were no signs all toilets would become unbearably filthy and unusable by Europeans. One questions the assumption that personal cleanliness is an exclusively European virtue. But even accepting the argument of different personal habits, what of the African or Asian whose habits are 'European', the man returned home after training in England, the educated man?

Strains of the Colour Bar

Indeed, a man like Mr. Mathu, the first African to be nominated to the Executive Council of the Colony, is likely to feel the strains and tensions of the colour bar much more than his less highly placed compatriots. There you have a man, of the highest importance and standing in his country, meeting active racial discrimination. By law Mr. Mathu is not allowed to buy alcohol. All the clubs, except one special inter-racial one, are closed to Mr. Mathu on grounds of colour. If, during Legislative Council sittings, Mr. Mathu walked into a big Nairobi coffee-house unaccompanied by some white official who had arranged it previously, he is most likely to be turned away. Every time he wants to visit the toilet he must seek out one with the appropriate sign, Executive Council Member though he be. And, of course, Executive Council Member though he be, Mr. Mathu is debarred on grounds of colour from acquiring a farm on the White Highlands of Kenya. I was told that Mr. Mathu had no desire to acquire land in the White Highlands but, really, that is irrelevant.

Perhaps I do not need to remind you that the colour bar is very real in Kenya. But let me add that because Kenya is not as industrialised as the Union, and also because it is a younger country in terms of European settlement, race relations have not as yet developed to the ugly extremes that are to be found in the Union. But it will, as the number of the educated Africans increases. Everything is there for its development. And, paradoxically, the Government is helping this development by its efforts to increase education. When I discussed the colour bar with European officials they all agreed that it made for African bitterness and that something would have to be done about it. Many said the colour bar must go. When I asked when, some were silent and others talked in terms of twenty-five, fifty, even 100 years.

It is perhaps appropriate to mention here the comment of a well-known South African Liberal and authority on Native Law, Mr. Julius Lewin. Mr. Lewin and I had spent an evening together in Johannesburg discussing the problems of the plural societies. He had said Britain had no business to adopt a high moral attitude about South Africa's colour bar while she practised the same colour bar in the territories under her control. He had said the colour bar in British territories made the task of South African Liberals so much more difficult. My sympathy for Mr. Lewin's view was strengthened by my researches into the colour bar in Kenya.

The effects, or at least some of them, of the colour bar on the European was also brought forcibly home to me when I moved among the white settlers. They were for the most part as decent and ordinary human beings as could be found anywhere. There was nothing monstrous or villainous about them. I liked some of them very much. There were the two farmers and their families in the Rift Valley with whom I spent a long and happy evening. One had come out in 1919, and had had to struggle very hard to make his farm a going concern. The other had come out even earlier. These were not the hard-drinking, riotous-living types, but simple and hard-working men. I met many others like them. It was, however, when they talked about 'their' Africans, or when I watched them dealing with 'their' Africans that I sensed a very subtle, almost elusive change of personality. They talked down to 'their' Africans, were paternalistically tolerant about what they called their 'laziness and lack of initiative and responsibility'. Subtly, they found comfort in looking on 'their' Africans as well-loved dogs when they behaved as expected, and as obstreperous and unreasonable children when they did not. With rare exceptions, I found this among both officials and settlers. I think it was something they were not even aware of. It came into play even when they talked about the old chief. And

the old chief had not missed it. When I took leave of him to go on the fascinating tour the Government had planned for me, he had said: 'You will see, they look on all of us as children. Even on me. And for them we are children who will never grow up'.

Whether, in fact, people who look on the blacks as the whites of Kenya do can, at a later stage, readjust their attitude is highly questionable. One thing is certain. Imperceptibly, a 'master race' mentality is in the making. It is the easiest way of safeguarding and entrenching the position of privilege of the whites. And many government officials become, or plan to become, settlers at the end of their term of service, so their interests are, quite naturally, the same as those of the white settlers. They call for co-operation from the blacks. They talk about partnership. And many officials have complained to me about the unco-operative attitude of the black leaders. I confess that, if I were a Kenya African, I would be as bitter as Kenyatta and the other leaders of the Kenya African Union against the general white attitude that the only co-operation possible is on their terms, with its tacit assumption that my position must always be that of a social, political, and economic inferior. Like them, I would say: 'This partnership is a fraud'.

The second of the twin problems is land. Both white and black populations have increased rapidly over the years. The land has not increased. And there is no getting away from the terribly acute land-hunger among some of the Africans. I visited one area in the north where population density, according to the official coping with the problem, was 1,000 to the square mile. But it would be wrong to give the impression that that is the general rule: I cite it only to illustrate the acuteness of the problem in some places. The government is doing much to teach the Africans soil-conservation methods and good husbandry. It is trying to educate opinion against land fragmentation. But all these good efforts are suspect because there is a colour bar on the land, too. My feeling is that the hardening and uncompromising attitude of the Africans over the land question is due in large measure to the fact that there is this colour bar. The European reply is: 'Everybody cannot own land. Look at Europe. There, millions do not own land. The Africans here must get reconciled to that'.

Hunger for Land

But that is cheating. In Europe there are cities and industries that offer the landless European an alternative method of making a living. Even South Africa, where only thirteen per cent. of the land is set aside for Africans, is sufficiently industrialised to offer alternative methods of making a living. In Kenya such alternatives hardly exist. Here is, also, a possible reason why each son inherits a portion of his father's land, with resultant fragmentation. So the dispossessed Africans look with hungry bitterness on the sprawling farms of the white settlers and say: 'They have stolen our land'.

'Let us eat', someone called. My mind swung back from the twin problems of Kenya. We were on the Ngong Hill. It was a fine afternoon. And in the distant mists I saw, or imagined I saw, the outlines of the sacred mountain. We made a circle round the food. There were two small flasks of brandy with the food. A large shooting brake bumped across the landscape from near the mountain to our left. It might contain whites, so two of my friends grabbed the flasks and hid them in the tall grass till the shooting brake was out of sight. Fleetingly, the intense humiliation flashed across the old chief's face. We ate and drank. As the sun was sinking we all stood up and turned our faces to Mount Kenya. Kenyatta sprinkled a little brandy on the earth. The old chief prayed:

'O God of Abraham and God of Isaac, God of our fathers, Father of all men, hear our prayer. We have brought our visitors up to this hill and together we turn to the mountain and bow to You. In your kindness you gave our fathers this beautiful land: do not let it pass from us now. There are those who came as friends but now they would take our land: look down and do not let it pass from us now. We were born in this beautiful land; our fathers and mothers were born in this beautiful land; our children were born in this beautiful land, and their children were born in it, too. Do not let it pass from us now. We pray that you should guide us to love one another with that love which this world cannot give. We pray that you should lead us as you led your servant Moses out of bondage to freedom. We pray that you should keep us under your protection and guard us from our enemies. And again we pray for our land for our land is the blood of our life. Look down in mercy, God, and hear our prayer'.

There was nothing more to say then: there is nothing more to say now, except that I left Kenya feeling there was desperately little time left for God to grant the old chief's prayer.—Third Programme

The Listener

All communications should be addressed to the Editor of THE LISTENER, Broadcasting House, London, W.1. The articles in THE LISTENER consist mainly of the scripts (in whole or part) of broadcast talks. Original contributions are not invited, with the exception of poems and short stories up to 3,000 words, which should be accompanied by stamped and addressed envelopes. The reproductions of talks do not necessarily correspond verbatim with the broadcast scripts. Yearly subscription rates (including postage): inland and overseas, £1. Shorter periods, pro rata. Postage for single copies of this number: inland and overseas, 1½d. Subscription should be sent to the B.B.C. Publications Offices, 35 Marylebone High Street, London, W.1, or any newsagent

Sir Max

EN years ago a party was held in London to celebrate Sir Max Beerbohm's seventieth birthday. He himself was present and uncomplaining at the thought that he was being overrated (after all, he declared, 'you are here to overrate me') expressed himself as immensely touched and pleased and honoured and grateful. The date was August 24 and as the eightieth anniversary of his birthday comes round next Sunday he may, one hopes, again find pleasure in the knowledge that, though there is no party, the good wishes of his many friends, known and unknown, are winging their way to Rapallo.

In one of his memorable broadcasts—all his broadcasts are memorable-Sir Max alludes to himself as a relic of an older, an easier and more pleasant world than this one. Somewhere else he refers to himself as an interesting link with the past-characteristically, a moment later, he withdraws the word 'interesting'. In fact he is much more than either a relic or a link. He is a man whose work, judiciously restricted so far as publication is concerned, has given pleasure to millions and will continue to give pleasure so long as grace and wit are capable of pleasing. By his courtesy, his style, his sensibility to the charm of charming things and charming people, and not least by his authority, he has regaled and given savour to an age transformed, since he was a young man, out of recognition. Nor have his gifts of irony, of sparkling, even acid, comment, ever left a scar. 'What I have written in my life'. he once said, 'has never been popular, but on the other hand it has been liked by the kind of people whose good opinion is dear to me'. As for his caricatures, the earlier ones, he admits, were violent, though he himself was never that. 'The distortions are so monstrous', he declares, 'so libellous. And yet that was how I saw my subjects-not in their presence, but afterwards, in my memory, when I sat down to draw them. And with most of them I was personally acquainted. I marvel that they did not drop my acquaintance. None of them seemed to mind'

Is style the man? Certainly Sir Max has seen that his own style has always been maintained. One remembers the broadcast that began 'Ladies and Gentlemen or-if you prefer that mode of address-G'deevning'. Comment could not be more succinct, unobtrusive-or effective. When he talks of his early days in London and tells us that at the Pavilion Music Hall 'there was alongside of the stalls an extensive drinking-bar, at which the barmaids were the only-or almost the only-ladies present', was ever delicacy more nicely served? All ages have their standards, and if Sir Max, like others, views the past with an affection that can hardly be bestowed upon the present, his is no permanently backward-looking gaze. The spirit of the times may be one that in matters of style levels down not up, but barring accidents a splendid future (we try to assure ourselves) awaits us all. When that day dawns Sir Max will be the first to raise his hat in salutation hoping, perhaps a little against hope, that the future will be compact with as much grace, wit, and gaiety as the past that he has known. If it is otherwise, the fault will not be his, when one recalls how much of grace and wit and gaiety and style he himself has helped to keep alive throughout the raucous years.

What They Are Saying

British youth through Russian eyes

LAST WEEK THE DISAGREEMENT on the conscription period in the European Defence Community countries was enthusiastically seized upon by communist commentators. A 'Russian Hour' broadcast from Vienna radio described Belgium's decision to reduce the period from two years to twenty-one months as a defeat for General Ridgway and a victory for the 'peace' partisans. It went on:

The mutiny in the Belgian Army, and the strikes of the workers assumed such proportions that the Government was left with no choice but to sound the retreat. It is said that this decision has rendered impossible the introduction of a two-year period in other countries. This is one of the biggest successes achieved by the peace movement in its fight against American rearmament.

Pravda was quoted by Moscow radio as taking the same line: the disagreement was 'proof that wide sections of public opinion in western Europe are opposing with ever greater determination the American policy of preparing for war'. Britain, however, continued to incur Moscow's displeasure. A Red Star article quoted by Moscow radio maintained that 'British ruling circles are determined to continue the armaments race and the policy of preparing for a new war'. Another Moscow home service broadcast reviewed a book by Berezhkov entitled The Disappointed Generation, describing the fate of young Britons suffering under American demands for 'uncontrolled rearmament'. The whole object of British education, said this broadcast review, was directed towards the training of cannon-fodder for the future war. According to the selection system used by 'the ruling classes' in schools, children from an early age were divided into three categories to ensure the segregation of the 'clerical class' from 'the common workers and the necessary reserves of manual labour'. The universities, to which only those in the highest category would ever be admitted, taught misanthropic racialist theories and chauvinistic propaganda and were being 'converted more and more into militarised educational establishments'. Further, all youth organisations in Britain had a clear class character, and were led by 'members of the aristocracy, representatives of the military caste and the big tycoons of the industrial

The sole youth organisation of merit was the Communist Youth League of Britain. Budapest radio, in a broadcast in English, last week indulged in a similar fancy. Britain today, it said, enjoyed the evil reputation of being the most militarised nation in the world. Not only did Britain have two years of conscription, plus three-and-a-half years spare time territorial service, but boys of fifteen were being recruited by the tory Government into the Regular Army straight from school, 'not as cadets or drummer boys, but as members of the Infantry Regimental Boys' Battalion'. Bucharest radio, on the other hand, confined itself to American militarised youth. A Bucharest transmission, quoting an article entitled 'The Cannibals on the Shores of the Potomac' in the Rumanian War Ministry's paper Aparaea Patrei, asserted that while American youth was being 'transformed into an instrument designed to serve American plans for world supremacy', her soldiers were being indoctrinated with the idea that they were 'supermen' who could do as they pleased.

In neighbouring Hungary, most broadcasts were occupied with Rakosi's elevation to the premiership. One broadcast, quoting the communist press, stated:

Our workers have received the news with happiness and gratification and are feting the head of the Government with an outburst of enthusiasm.

A similar outburst of enthusiasm was alleged when Gheorghiu-Dej was elevated to the premiership in Rumania at the time of the purge of Anna Pauker and other ministers two months ago. Since then the purge of party 'deviationists' and of 'class enemies' has been extending throughout the country, but in the process, the urgently needed teachers, engineers, and other specialists of 'the old school' have been swept away with no one to replace their skill. In face of this dilemma, Bucharest radio last week broadcast an interesting article in Scanteia condemning over-vigilant party circles and other bodies for having ousted specialists merely because they had served the old regime. Instead, they should have 'developed the revolutionary vigilance of the workers in order to prevent the adverse elements from damaging enterprises and worked patiently to attract the old specialists to contribute by their knowledge to the construction of socialism'.

Did You Hear That?

A VICTORIAN VISION REALISED

In London the Victoria and Albert Museum is shortly to celebrate the 100th anniversary of its foundation. CHARLES GIBBS-SMITH, the historian of the museum, spoke about it in 'Radio Newsreel'.

The Victoria and Albert Museum started as the museum of ornamental art', he said, 'It originally occupied the first floor of Queen Mary's present residence—Marlborough House. The Treasury had allowed it £5,000 to buy some of the objects of applied art from the Great Exhibition of 1851, which had closed down during the previous winter, and the new museum was intended to show craftsmen the best there was in their trade, and also to help the public get some idea of what good craftsmanship meant. After all, they argued, if public

taste is not educated, commercial demand will not be for the best.

Soon the caught on with the general public and increased its scope to include beautiful things from all over the world. Then, in 1857, we had to move out. Marlborough House was needed for the Prince of Wales, later Edward VII. It was Prince Albert's idea and, as everyone can now see, a brilliant idea, to have a cultural centre with colleges and museums grouped together for students and public alike. So, as President of the 1851 Exhibition Commissioners. he persuaded his colleagues to spend the profit from the exhibition-no less than £186,000-on buying the great South Kensington site, acres on acres, on which were to be

built so many of our famous institutions, from the Albert Hall in the north to our museum in the south-east corner—a great enterprise carried

through by a great man.

'So in 1857 we opened our doors again, this time with a cluster of other collections around us, and together we were grouped as the South Kensington Museum. We grew and prospered mightily, and by the end of the century the art collections had pushed the scientific ones off the site. In 1899 Oueen Victoria commanded that the collections should be called the Victoria and Albert Museum, and so it was ten years later that that title was to apply only to the art collectionsthe Science Museum then being specially named and splitting off from us.

By this time the V. and A. had become one of the great art museums of the world. No one has ever been able to estimate how much we are worth—it is certainly millions! Today, with the Director's new plan all but finished to present the masterpieces of the collections in historical and period groups, the general public as well as the student and scholar now appreciate the museum more than ever. For today there is a great new public growing up, a public made infinitely more aware of the pleasure you get from works of art, and it is this public that has been added to our traditional student population'.

'CHEZ MOI'

Londoners will now have to do something about the clearer numbering or naming of housing and business premises, which ought to make the postman's job easier. Revised regulations on the subject have lately been passed by the London County Council. As a matter of fact, a Building Act, approved as long ago as 1939, laid it down that the number or name of every building in every street, row of houses, or block of flats, must be marked so as to be clearly visible from the road. The passing of the new regulation has prompted JAMES LAVER to answer, in the Light Programme, the question: when did we first start giving our houses names?

'That was far too long ago for even the historians to remember'. he said, 'There were plenty of names in Shakespeare's London-not at all the sort of names we have now. You wanted a bookshop: what did you ask for? It might be that you would ask for the goose with two necks, over against the Red Lion in Cheapside. You wanted a tailor, so you looked for the sign of the scissors. In earlier times

still, you simply asked for the house of John Smith. And, as for numbers, nobody bothered about them until about the end of the eighteenth century.

Streets, of course, were named earlier, very often to perpetuate the man who built them. If he were titled, he might have quite a lot of names, and so to this day you have that curious group of streets near Charing Cross: George Street, Villiers Street, Duke Street, Of Alley, and Buckingham Street — adding up to George Villiers, Duke of Buckingham, We have never adopted the very practical American system of First Avenue, Fortysecond Street, and so on. Perhaps it would be much more convenient if we did -but wouldn't we lose something? What of the



The newly arranged Italian Gothic Gallery at the Victoria and Albert Museum

individualist and the poet? To me, at any rate, there is something rather charming in "Mon Repos" and "Chez Moi". And I once saw a trim little villa in a remote suburb with the touching name of "At Last ". I wonder if it was? '

'THE INCOMPLEAT HITCH-HIKER'

'When I temporarily gave up travelling in the horribly overcrowded North African trains and converted myself into a hitch-hiker, one of my reasons was that I rather fancied myself as coming back to England to produce something after the style of Izaak Walton's The Compleat Angler', said Homer Sweete, in a talk in the Home Service, 'full of helpful advice to the would-be "hitcher". But I found I could not, with an easy conscience, advise anyone to go hitching through Morocco. Perhaps I attach too much weight to my own personal experiences. Possibly I lack the necessary technical hitching skill.

I had intended to begin The Compleat Hitcher with a discussion of the most effective signalling method. For instance, I do not much care for the timid, fluttering, hesitant wave, lasting about one-fifth of a second, that says, in effect, "Of course I'm not really terribly good at this sort of thing, but if you should care to give me a lift, I'd be most awfully obliged to you". Nor, on the other hand, have I the kind of character that permits the hardened hitcher to stand squarely in the middle of the road, waving both arms like a frenzied semaphoresignaller, and I regard the jerked thumb as slightly vulgar. I finally worked out a gesture that I thought better suited to my personality. I raise a policeman-like palm, then wave it, with a gentle, undulating motion, in the direction I want to go, at the same time pointing with the index finger, while raising the eyebrows interrogatively and distending the lips in a half-smile. Thus I create, as far as possible, a total impression that combines beseechment, kindliness, firm expectancy, and the information that I am an Australian school teacher with a sound knowledge of international finance. This mixture of sternness and friendliness is meant to convey the idea that I naturally expect obedience, but that my demands will never be unreasonable.

I am afraid it did not work out. A procession of motorists saw me sitting on my pack or standing by it, on the long, hot road from Casa-

blanca to Marrakesh, and there I stayed.

There are, too, various ways of not stopping. You see hordes of kindly, merry-faced people who would cheerfully carry you from Archangel to Sydney if they were going that way, but who are turning off the main road in a hundred yards or so. This they generally indicate by smiling sympathetically and pointing off at an angle. One more than usually courteous gentleman, clearly French, who was cruising past me at sixty miles an hour, smiled, shook his head repeatedly through three parts of a circle, pointed off to the right, took both hands off the wheel, gestured that double-flat-palm Mediterranean gesture

of minor despair, shrugged, smiled again, bowed, and then grabbed frantically at the wheel to keep himself out of a nearby ditch-digging operation. Other drivers, however, pretend not to have noticed you at all, and drive straight ahead, with their eyes glued steadfastly on the road. The richer Arabs do this best, sweeping past with a magnificent, Oriental impassiveness that blends somewhat incongruously with their Manchester-fashioned pin-striped robes and their gleaming American limousines. Others again give you the superior type of leisurely inspection that would go well with lorgnettes, as if they had heard there were such things as pedestrians, and found a passing interest in now beholding one in the flesh.

'As I have a mild inferiority complex of my own, a hang-over from early childhood, each time that somebody apparently well equipped to give me a ride flashes

past in this way without even deigning to point a finger at a cross-road, I feel exactly as if he had said, "Huh! Homer Sweete, eh? So he can't buy a car, eh? Well I'm certainly not going to give him a lift".

Eventually, my contemplated Compleat Hitcher was condensed into one single hint, which I followed myself, and now repeat for the benefit of the inexperienced: take a train'

'DANCE OF THE GRASSHOPPERS'

'I must say at once that I am not a grasshopper specialist', said JOHN HILLABY, speaking in the Home Service. 'But when I discovered a thriving colony, on my own doorstep, so to speak, I became what you might describe as an amateur grasshopper-watcher, and very pleasant

'The particular colony of grasshoppers I have in mind live on a grassy slope covered in rye grass and ruddy sorrel. It is quite a small area, but there they are, year after year, and the bulk of the population is concentrated on a patch of ground about half the size of a tennis court. The average grasshopper, I found, could do a flying jump of about eighteen feet, which is really prodigious. It is as if I had swarmed up one of the pillars of St. Martin-in-the-Fields, hopped on to Nelson's monument in one bound, and then leaped off again and landed on the Admiralty Arch. The second-discovery I made was that grasshoppers are not really grasshoppers at all for most of the time. They are actually grass-walkers. They do not spend their life bounding from one stem to another: they find a nice juicy piece of rye grass, they inspect it, they walk up it—slowly—one leg after another. They sample it, and then, if they approve—as they generally seem to—they spend the rest of the day there, munching away like a contented cow. At least I presume they do.

'It is difficult to say whether the song, or the stridulation, as they call it, of the grasshopper is a love call or merely a means of ridding themselves of surplus energy. The fact is the males seem to make much more noise when there is a female somewhere about the place. It is doubtful whether many of the males actually see her, but they hear their rivals industriously rubbing their back legs against their forewings, and they start stridulating themselves, until the whole colony is vibrating with what we must call either bottled up love or excess energy, or perhaps both. The noise they make has now been recorded and analysed. It is described as "a combination of single and plural impact pulses, multipulse chirps and trills". Well, I suggest you listen to it yourselves. I do, however, suggest that the composer Bucalossi had really listened to the creatures before he wrote his famous "Dance of the Grasshoppers"

I should stress the point that only the males make this or, indeed, any other audible noise. The females, after the manner of at least some of their kind, are dumb. They are also remarkably fickle. In my little colony there is what you might describe as a Venusburg for courting grasshoppers, on the sunny side of a large ant hill. At midday, when the sun is strong, you can both see and hear the males stridulating away like

troubadours for the benefit of some brassy-faced female who has crawled up on to the top of a piece of ruddy sorrel as if males did not exist. She seems quite unaware of

their presence.

'Does she know, for instance, that seven or eight handsome insects are giving a grasshopperish imitation of the Huddersfield Choral Society for her particular benefit? I suspect that the clicking call of the male grasshopper is not the mating call or lover's serenade, but merely the insistent complaint of lovers of all time. You know: "Oh mistress mine why don't you heed me?" And so he stridulates away his tender passion, looking just as comical as any other persons do in that condition—comical, that is to say, to onlookers unaffected by the emotion.

'And so the grasshopper chorus

goes on through August, into September with its lengthening evenings and dark flowers. They still sing while the sun retains its power. But the cold is too much for them. Even the love of grasshoppers has its season, and by late October most of the singers are dead. But by that time the eggs of those fickle females are deep in the ground, and another chorus awaits another season and another life-cycle enacted vigorously, amorously on the sunny side of

an ant heap on Hampstead Heath.

'You may ask why I-or anybody else-trouble to watch grasshoppers, and if justification is necessary I can say that the pursuit, pastime, study—call it what you will—is akin to locust research, which is very important indeed. Locusts are grasshoppers which have developed the habit of swarming and migrating until they have become an economic problem of the first magnitude.

'For myself, I get a great deal of pleasure out of a lively and colourful creature which makes music with the outside of its legs and listens through a hole in its stomach'.

BRANDY FOR THE CURE

Speaking in the Home Service of a recent visit to Andorra, J. BARCLAY-BARR said: 'The basic industry of Andorra-I might almost call it the aristocratic profession up there—is still . . . smuggling. It is the occupation of fathers and sons—yes, and mothers and daughters, too -handed down among the best, bluest-blooded Andorran families. As one worthy citizen I met in a little taberna in Andorra-la-Vieja, the capital, told me with great pride: "My eldest son is coming on very well. He knows all the routes in and out of France now. He has trained two dogs of his own. In another month or two he'll know the ways into Spain as well as I do"'.



A Great Green grasshopper

Cultures in Transition

HILDA KUPER gives the last of seven talks on 'Partnership in Africa'

AM going to look at partnership as an effort to direct the present divergent inter-racial currents into a particular political stream. The present meeting of white and black in Africa is, after all. part of the general process of change, a process which has been gathering momentum over the centuries. It is not easy to direct, control, or predict, but it is not quite so difficult to understand. The process in different forms provides the framework for the history of all mankind. In Africa, people of the bow and arrow were attacked by people armed with spears and shields, sedentary agriculturists were invaded by more mobile and aggressive cattle keepers; centralised kingdoms extended their control over loosely organised communities. People of Bush, Negro, and Hamitic (that is, Caucasian) stock fought and fused. The physical and cultural intermingling of Hamites with Negroes gave rise to the various Bantu-speaking tribes occupying the southern twothirds of Africa. In the interaction, small groups were sometimes annihilated or forced to flee, but on the whole people in close contact developed methods of living together in a political peace which proved sufficient for survival. The conquerors were often few in number and in some cases they imposed their language and many of their customs while in others they assimilated the culture of the conquered. On the other hand, a fairly clear division on economic and social lines still exists in some East African tribes between pastoralists of Hamitic origin and Negro agriculturists.

Part of the Process of Social Evolution

Contact with western civilisations through different national and other smaller groups is therefore part of this great process of social evolution. It involves, like biological evolution, increasing complexity of organisation, and specialisation of the parts. At the present time western democracy is seeking to guide the process in one direction, that of balanced differentiation, and totalitarianism in another, that of suppression of differences. The policy of partnership, the latest offshoot from the parent stem of British colonial policy, seems to me to be based on western ethical values. The question is, will it wither lits trusteeship did, or will it flourish? Everything depends on whether lit is rooted in fact, in actual conditions, or not. What are the obstacles it has to face? Can partnership incorporate rising African nationalism and the entrenched position of the white settlers? To do so, and so to perpetuate itself, needs more substantial qualities than good will and promises. It will have to reckon with what is, as well as with what is desired. We are driven from high ideals to examine the position as it has become.

Every stage in contact, every innovation, no matter how trivial it might seem, involves choice and affects the relationship between groups with particular and different interests. The agricultural officer who tries to introduce a new cash crop or limit the number of livestock, the missionary who sets up a church or a school, the trader who brings in hitherto unknown goods, soon learns that the success of his efforts does not depend on any objective measure of efficiency or empirical extension of knowledge or possessions. It depends in part on the values attached to things already accepted. It is proverbially difficult to get conservative Africans to limit the number of their cattle because cattle in the traditional milieu have so great an importance in marriage and in other ritual and legal situations. But success or failure of innovations also depends on the techniques, personalities, and status interests of the people who introduce and accept these innovations. For instance, a particular missionary or a particular African may determine the religion of a whole tribe. If a chief becomes converted to Christianity all his subjects may follow his lead, as in the case of the Tzwana of the Chief Khama. On the other hand, in tribes like the Swazi where the chief retains his traditional role and appeals to his ancestors on behalf of the tribe converts tend to be drawn from less-privileged groups of commoners.

It is clearly not things but people who interact and their interaction is regulated by varied and often conflicting interests. Until we know what the interests of groups in Africa are, we cannot really talk of

partnership and if we know what they are partnership may end at the stage of talk. Partnership may be a new formula, but the interests of the potential partners, their cultural characteristics, have developed over a long period of time and partnership may not offer sufficient inducement for Africans or whites to modify their interests. To put it bluntly, the type of partnership desired by the British Government, the partner initiating the contract, may be such as to render it void from the start.

Let us look first at the Africans. African nationalism does not imply the existence of an African nation. The one is a movement of uncertain leadership, the other is as yet non-existent as a unit because in the vast continent of Africa there are hundreds of tribes, each with its own history and way of life. In British West Africa alone the population. predominantly but by no means entirely Negro, is organised into a number of independent self-conscious units. There are developed Fulani (that is Moslem) emirates, the Ashanti confederacy of chiefs, and also many small fragmented societies organised on the basis of kinship and descent. Similarly in East Africa, traditional systems range from great centralised kingdoms of the Baganda to communities organised into clans like the Kikuyu of Kenya, or into age grades like the Nandi and Masai, and while many tribes practise agriculture and own cattle, others are proud nomadic pastoralists, bravely pursued by missionaries and anthropologists. In Africa south of the Zambezi one traditional pattern predominates—each tribe revolves round a hereditary chief.

This cultural variety is important but it must not be exaggerated. It under-estimates the tremendous effect of past contact and overemphasises African conservation. Moreover, the piling up of ethnographic detail produces an impression of chaos where there is in fact only variations on a few themes. African societies can be broadly classified into a limited number of economic and political types and the difference between the most varied African tribes is slight when compared with the difference between the most highly specialised African society and developed industrial societies. By comparison, African stribal societies are relatively undifferentiated and homogeneous. Individualism is curbed by the pressure of kinship obligations and by the importance attached to age and tradition. The peoples are predominantly peasants and there is little differentiation on the basis of conspicuous wealth. Value is placed on generosity and hospitality rather than on possession and accumulation. It is possible, therefore, to speculate about fundamental differences in attitude between whites and blacks in the traditional milieu.

Tribal Differences in Land Tenure

We can illustrate this by looking at this different relationship to the soil. Details of land tenure vary from tribe to tribe, but the underlying principle in all African land tenure is that land is the collective possession of a group. Individual ownership and the right to buy and sell are not acknowledged. And in tribes where there is a chief he acts as custodian of the land. The individual has rights of usage secured through membership of a kinship and political group and the communal bond between the people and their land is frequently expressed in earth cults and ceremonies. The people show intense antagonism to any proposal to modify the customary land laws. Even among the Ashanti, who have adopted many new ways, chiefs run the risk of being deposed if they do not take every step (including incurring heavy personal debt) to retain the ancestral land. But while we can contrast traditional African society with industrialised western society in broad terms, contact between the two has made African society more complex and has westernised sections of the African people. Throughout Africa the land situation has changed. Tribal territory is now part of British territory. In some areas vast tracts of land were alienated and the tribesmen had to adjust both to foreign concepts, such as freehold and concessions, and to the political and legal systems sanctioning and enforcing alienation. Furthermore, as a direct result of alienation, many Africans suffered a shortage of land, which is one of the most powerful economic forces driving Africans to migrate to the white

man's farms and cities. Some migrate for months, others for years, or never return at all. In this crucial matter of the land, therefore, we can see how the process of culture change became complicated, firstly by the new set of rights vested in Europeans and secondly by the development of African economic groups alien to the traditional structure. Land-less and land-hungry men, the already dissatisfied nucleus of the African proletariat, have increased the range of traditional variation and added further conflicts. City life, for all its frustrations, offers new opportunities for individual ability in legal and illegal organisations -trade unions, squatters committees, national political movements and so on. But the line between tribal and urban African society is not absolute: schools, trading shops, and churches extend throughout the Territories. Moreover contact between town and country is maintained by the great hordes of temporary migrant labourers who carry back from the cities new knowledge, skills, and ideas. In rural areas there are fewer educated westernised Africans but they form, as they do in the towns, the new intelligentsia. In tribal areas they react to the presence of chiefs or other traditional authorities; in urban areas they are relatively free from tribal control and direct their criticism mainly against the Europeans.

So another thing we have to ask ourselves is with whom is partnership to be: with the masses or with the few; with the peasant-minded conservatives or the more radical urban proletariat; with the chiefs or

commoners; with the educated or uneducated?

Look, for example, at the dilemma facing the administration in its choice of partner. In many tribes there is a delicate and sometimes precarious balance of power between the chief, his kinsmen, other aristocrats and commoners. His powers, secular and sacred, are extensive but checked by various councils, and the general maxim is that a chief is chief by his people. The chief, in fact, is the central figure, and while the rules governing his appointment may vary from one tribe to the next they always stress a hereditary principle. Yet under British control the administration has generally assumed the right to accept, depose, and appoint chiefs. Moreover, the chief is expected to be the link between the power groups in his own society and the directing force of the administration. If he is educated, he is in advance of the uneducated majority who become critical and sometimes hostile because of innovations which in actual fact he himself may have opposed; if he is uneducated, he is criticised by the new elite as backward. His relationship vis-a-vis the administration fluctuates according to whether he accepts its instructions or ignores them or challenges them. He will be labelled conservative or communist by the nature of his backers. Indirect Rule and Trusteeship relied on docile traditional African leadership, but the often opposing interests of the Africans themselves made it difficult for the chief to fit into the administrative plan; if the administration really intends to enter into partnership with African chiefs it will have to recognise they are outgrowing docility.

But the administration represents only one section of the Europeans. There are also missionaries, traders, farmers, industrialists, and other white settler groups. Now it is mainly because of the diversity of these white interests rather than African interests that British policy is marked by local variations and inconsistencies. Why is it that it is in West Africa, with all its tribal complications, that there is the closest approximation to partnership and that partnership seems impossible in southern Africa where there is the least diversity between the tribes, greater economic interdependence between the races, and a large number of educated and Christian Africans? The answer is fairly obvious. In West Africa there are no white settlers afraid of losing privileges they can only maintain by excluding competition and bolstering their position by the myth of racial superiority. Because different white groups are struggling to secure their own particular interests, the content of inter-racial interaction is inevitably not constant. Yet partnership, if it is to be a continuing relationship, as the term implies, must be consistent in its partners. It cannot dissolve or resume partnership according to expediency nor play one partner against another. Partnership implies ethical obligations and, unlike domination, cannot be imposed by force, nor can it fluctuate with shifts in the power of different sections of the white group. In the Union of South Africa the present native policy reflects the dominant interests of backward white farmers whereas the former policy reflected the stronger influence of industrial pressure groups. But in both cases the Africans as such were subordinate. The possibilities of white-black partnership hinge therefore on whether colour itself is entrenched as a legitimate vested interest, overriding all other interests. As long as this is the case, partnership cannot develop into a permanent relationship. The goal of partnership involves a type of culture change which runs counter to the established patterns of race relations in many parts of Africa. Moreover it implies that the partners are single entities with a clear identity of interests whereas in fact, as I have tried to show, the interests within each group are varied and often conflicting, and stretch across the colour line at all points, economic, political, and social. This means, translated into action, partnership in Africa cannot be based on a perpetuation of colour difference but can only be developed on the broader lines outlined in charters of human rights.

—Third Programme

Research for Plenty—III

The Control of Plant Diseases

By F. C. BAWDEN

N western civilisations only a small minority of people are now engaged in growing food, an occupation the townsman often sentimentally describes as the natural life. Nothing could be further from the truth. Agriculture is an industry every bit as artificial as any other; a crop of wheat or potatoes is just as much a product of man's activities and is no more a natural phenomenon than is a factory or a mine. To think otherwise is to misunderstand the revolutionary action of those who first turned from food gathering and hunting to agriculture; and this misunderstanding obscures both the immense changes the world has undergone as a result of agriculture and the reasons for the many problems and difficulties that today confront the growers of crops.

It was only a few thousand years ago that man started to produce his food by raising crops. The new culture was so successful, and developed so rapidly, that, within this trivial fraction of the world's total history, most of the habitable parts have been entirely transformed. Over large areas the wild vegetation has been removed, and the physical, chemical, and biological properties of the soil have been altered. From the hundreds of thousands of different kinds of wild plants, a few hundred have been chosen, drastically altered by breeding and selection for some specific purpose, and then multiplied prodigiously at the expense of others. The course of evolution has been

changed and its tempo immeasurably increased. None of man's more recent activities is likely to cause such rapid changes over so much of the earth's surface, and none has greater potentialities for affecting his future, for good or ill.

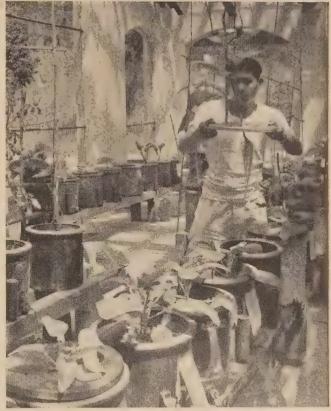
By his industry as a farmer, man has permitted the human population to expand enormously. So far, he has succeeded in providing enough food to prevent general famine, but this has been done largely by continually increasing the area of land under crops. The increase in total production has tended to obscure the fact that his interference with the previous biological balance has had many undesirable consequences that keep yields below what they could be. There are still areas that produce little or nothing of value to human beings; some of these will certainly have to be brought into cultivation and these possibilities will be discussed by other speakers in this series of talks. But the total area of land is limited and, to increase food in the future, we must look less to increased areas under crops and more to increased yields per area. Research for plenty now calls for a better understanding of the causes of soil erosion, depletion of fertility, and the recurrent outbreaks of pests and diseases, so that the immense losses they now cause may be prevented.

My main concern now is with the effects of agriculture on the incidence of infectious diseases, those caused by the microscopic fungi

and bacteria and by the ultra-microscopic viruses; but the same general principles that control the incidence of these disease-producers or pathogens hold also for most insect and other pests. When so much has been changed by agriculture, it would be futile to discuss what has been changed most, but few things can have been more affected than the evolution of pests and diseases. Evolution is usually considered a ponderous process that acts to produce changes on a time scale measured in geological periods rather than in human life-times. This was true before agriculture was invented, but it is not true now. Under domestication, the kinds of plants that predominate in any region can change with startling rapidity; and with them, after only a small time-lag,

the prevalent pests and diseases change too. Until men started to move plants from their native homes to be cultivated in other districts, the vegetation in any district was reasonably stable. It consisted of species that had slowly become adapted so that they were in some kind of equilibrium with their environment and with one another. Their only essential requirements were that they competed sufficiently well with their neighbours to survive, and one important qualification for survival was that they were not too adversely affected by local pests and diseases. Plants growing in the wild become diseased, and diseases have doubtlessly limited wild species that otherwise might have predominated. But in most wild habitats diseases do not have an easy time. Their activities are greatly restricted because most viruses and pathogenic organisms have limited host ranges, that is to say, they can infect only a few kinds of plants, and the vegetation in most wild habitats is a mixture of many different kinds. If one plant becomes infected, its neighbours are probably different kinds and not susceptible to the same pathogen. So that each victim has to be found and attacked singly. and attacked singly. Growing a crop means replacing variety by quantity, and this tips the scale far over in favour of the pathogens. It increases the number of potential victims in a given area, and so makes it easier for one to be found, and this victim is surrounded by others, all susceptible to attack. Spread, instead of the chancy business it was in wild habitats, becomes almost a certainty.

When agriculture started, the plants first cultivated must have been those native to the area; for instance, wheat in the eastern Mediterranean. They were chosen for some character that attracted the attention of the intending farmer and were probably oddities, or even monstrosities. Almost certainly they were rarities that were not faring too well in the wild. They would not have been widely exposed to pathogens so that the more susceptible races would not have been culled by natural selection. These unadapted plants were taken, freed from competition with more vigorous ones, and their numbers rapidly increased. This provided their potential pests and diseases with a free field to develop their activities. That they wasted little time is shown by references in Books of the Old Testament to crop diseases, and by the fact that in the Roman period an annual festival, the Rubigalia,



Testing plants at an agricultural station in Malaya where, under the Colombo Plan, research is made into methods of producing better seeds

was held at which the help of two gods, Rubigus and Rubigo, was invoked to protect the crops of wheat from rust diseases.

The need for protecting crops from diseases has progressively increased as agriculture has spread over larger areas, and as plants have been moved in increasing numbers to areas remote from their homes. The future of a species, either plant or animal, newly introduced into a region is something about which forecasts are never safe. Several things can happen. Conditions may resemble those in the region from

which it came, and then it will continue much the same and suffer the same diseases. It may meet such adverse conditions, either climate or some virulent disease to which it was never previously exposed, that it soon fails. Or it may find conditions that suit it, perhaps much more favourable than in its original home, and a region relatively free from important parasites and predators. Then it may flourish to an extent unknown before: the potato in Ireland, rubber in Malaya, or the rabbit in Australia, are examples of this kind of thing. The period of well being and rapid increase, however, is usually a temporary phase. Sooner or later parasites and predators from its old haunts catch it up, or some local ones become adapted to attack it. Then there can be disasters such as the historic outbreak of potato blight which led to famine in Ireland during the eighteen-forties, or the current destruction by virus diseases of cocoa trees in the Gold Coast.

Periods of freedom from major diseases are likely to be fewer and to last for shorter periods in the future. The increase in travel, and the growing world-wide traffic in plants, combine to make it about as easy for pathogens now to spread from continent to continent as it used to be from county to county. This not only



A helicopter spraying crops in Cambridgeshire, as a protection against pests and disease

increases the area over which already-known diseases occur, but it may also produce what are in effect new diseases. The spreading of viruses. fungi, and bacteria from one region to another brings them within reach of new kinds of plants, some of which they may be able to attack; and it also takes them into new environments which may allow them to spread more rapidly and cause more severe effects than previously. The mere juxtaposition of a pathogen and a susceptible crop is not enough to lead to an outbreak of a disease: this happens only if the climate and the conditions of the crop also favour the multiplication and spread of the pathogen. In this country, for instance, unless potato crops have been sprayed with a protectant fungicide, they become blighted after wet or muggy spells, but not when the weather is fine and dry. No generalisations can be made about the effects of weather on disease, for diseases are individual things and different ones are favoured by different conditions. Their different regional distributions and fluctuations in prevalence from year to year mainly reflect their dependence on a certain kind of environment.

Causes of Increase in Virus Diseases

The movement of living plants around the world is, perhaps, particularly likely to lead to outbreaks of new virus diseases. This is because symptomless carriers of viruses occur commonly, so that plants of one kind that are perfectly normal in appearance often contain viruses than can cause serious diseases in another kind. Other features of modern agriculture will also favour the increase of virus diseases unless they are appreciated and countered. One is the heavier manuring now used, because viruses spread more rapidly in well-fed crops than in starved ones. Another is the tendency of growers, in their search for uniform products of high quality, to propagate an increasing number of crops vegetatively instead of from seed. No better method of spreading viruses could have been developed. When a virus infects a plant it usually invades all the vegetative parts, roots, stem, and leaves, and remains active in them as long as they remain alive. But viruses rarely pass into seeds, and the sowing of seed from infected plants generally produces healthy seedlings. The propagation of infected plants by vegetative tissues, such as tubers, bulbs, corms, runners, or cuttings, will perpetuate the viruses and give rise to infected plants.

Plants, unlike animals, once infected with viruses never recover; they remain infected indefinitely, and they can also continue to contract further viruses. The accumulation of more and more viruses with increasing age explains the decline in cropping power that occurs in varieties of most kinds of vegetatively propagated plants; this is a fact long recognised and described under such terms as degeneration, senility, or running-out, but attributed to a supposed weakening effect inseparable from asexual methods of reproduction. This interpretation is understandable because the invigorating effects of sexual reproduction on degenerate lines of such plants as potatoes can be dramatic, but they occur solely because reproduction by seed gets rid of the accumulated debilitating viruses. The lines of many crop plants that are extensively propagated today are in a condition that would be paralleled in a man who continuously and simultaneously was suffering from mumps, measles, chicken-pox, and the common cold. Small wonder they yield poorly, and there is probably no single measure of disease control that would more rapidly increase yields than to replace them by virus-free stocks.

This would be one hygienic measure among the many needed to improve the health of crops. If we are to get the increased yields the world needs, the well-being of crops will have to receive far more attention than it has up to now. Life in towns and cities became tolerably free from plagues and pestilences only when sanitation and hygiene were treated seriously. Overcrowding in crops far exceeds anything that happens in towns, yet most are left to take their chance with no attempt to destroy sources of infection or to protect them from the almost inevitable consequences. This is so despite the fact that control measures for many diseases are known, and their practical value is regularly demonstrated by the high yields got by those progressive growers who use them. The study of plant diseases is a relatively new science. It has already achieved much, but more skilled workers are needed if the balance between plants and diseases, which has been so drastically changed by agriculture, is to be restored and maintained in favour of the cultivated crops.

More plant pathologists are wanted for two reasons. First, there should be more working as general practitioners among the crops, to diagnose the diseases and to advise on the use of already-known control measures. Many of the present losses could be avoided by such pre-

cautionary treatments as seed disinfection, a correctly chosen rotation of crops, a protectant spray or dust, the use of a variety bred for disease resistance, or by selecting virus-free lines for propagation. But these practices will not become general unless there are trained people to adapt them to local conditions and to demonstrate their value in increasing yields. Also, only by having more pathologists observing the world's crops is it likely that outbreaks of potentially serious diseases will be noticed early enough to be eradicated or prevented from spreading widely. In too many countries plant diseases go almost unnoticed, and quite unstudied, until they have spread so widely as to threaten the survival of an important crop. Crop diseases, like forest fires, increase geometrically with time, and, like fires, are more easily dealt with at the start than later. Avoiding a catastrophe is less spectacular than overcoming one, but it is much more economic; the main hope of avoiding disastrous outbreaks in the future is to increase the number of people who are looking for them and who are skilled in combating them.

Secondly, more pathologists are needed to study the diseases for which there are, as yet, no adequate control measures. Perhaps first among these are the virus diseases of perennial plants grown as orchard or plantation crops, but there are also many soil-borne and wind-borne pathogens against which protection is urgently needed. Past experience provides ample evidence that preventive measures can be found and that their discovery will abundantly repay the cost. A shift is needed in the emphasis in plant breeding; while producing varieties for high yields or quality, what measure of disease resistance the wild parents possessed has often been lost. The cheapest method of disease control is to grow immune plants, and losses could be lessened by making disease resistance a first essential when parent plants are selected to breed new varieties. This will not alone achieve our ultimate goal of healthy plants; plant pathogens are shifty enemies and as capable of change as the plants they attack. When threatened in one way, they have an unhappy knack of reacting by producing new forms that can penetrate the latest crop protection. But this is no reason for despair. It means simply that protection must be treated as a continually evolving process, in which the pathologists try to keep one jump ahead of

Although the ideally healthy crop may be a long way off, extending work on crop protection could reduce the large losses now suffered. But this will not happen unless trends in research alter. Science tends to become increasingly lop-sided, with biology getting too little support and too few of the best research workers. Most other branches of science have been more favoured, with the result that the world is threatened with the absurd position of a huge human population supplied with medicine to prolong their lives and intriguing gadgets to while away their time, but in grave danger of lacking the one essential commodity, food. It was, perhaps, to be expected that man should consider his own health and nostrums, and even his physical comforts, amusements, methods of travel, and armaments, more important than the health of plants, but it is high time that he recognised that all other things are secondary to the production of food.

A Stimulating Challenge

With only limited new areas for agriculture now to penetrate, the future depends mainly on increasing yields per area. Only this way, too, can the peasant's standard of living be raised above the subsistence level. This can be done, by irrigation, by better manuring, and by protecting the high-yielding crops from the depredations of pests and diseases. It will be costly and will call for study by the best research workers. It is not a simple problem in technology, but calls for a detailed study of such fascinating problems as the way in which parasites evolved from harmless organisms, the nature of disease resistance, and the origins of viruses. There is no lack of stimulating challenges; on their acceptance and solution, the well-being of future generations may depend.—Third Programme

Two useful works of reference from Dent's are Everyman's Dictionary of Non-Classical Mythology and Everyman's Atlas of Ancient and Classical Geography. The former has been prepared by Mr. Egerton Sykes, who has arranged his material in short articles which describe the mythological figures of the Near East, Europe (including legends of the Celts, Teutons, Slavs, and Basques), India and Persia, America, North and South, Australasia and Indonesia, China and Japan, and Africa. The second book is a new edition, revised by John Warrington. The books cost 15s. each.

Puyé in New Mexico

The last of three talks by GEOFFREY GRIGSON on his travels in the U.S.A.

EAL and unreal are not good words, yet employing them both for a while I wish more had seemed real to me after 7,000 or 8,000 miles of the United States. I had spent the whole afternoon working in the Library of Congress. When it was going dark I finished and came out, and from the steps looked at the Capitol. As I had been in search of a reality inside the reading room, so the enormous, white, floodlit, upside-down bowl of the Capitol offered a stunning unreality. A man I knew hurried along the sidewalk, Conrad Aiken, the year's Poet-in-Residence in the Library of Congress. What he was, what he carried about with him—that was real enough, and I let his hunched, hurrying figure carry it away without calling

to him. In brief, people I had met in the United States, poets or shoe-shiners, professors on the campus or children, taxi drivers or railway redcaps, had been real enough. The organisms, human, non-human, vegetable, had been real, but not the things made by the human organisms, not the Capitol, not the cities, the bridges, the houses one by one, not the roads straight for 100 miles. Against the white Capitol at this moment I had my fingers round a fragment of reality in one pocket, a sherd of black on white pottery picked up a week before outside the ruins of a medieval pueblo, a pre-

Colombian village or town of the Tewa Indians in New Mexico. Inside the library I had been after what anthropologists and archaeologists had written about the old pueblos or about the living Pueblo Indians. The black on the fragment of a medieval, pre-Spanish storage vessel: the Indians had taken a plant called *Cleome serratula*, or Rocky Mountain Bee Plant. They had boiled it in water, removed the woody parts, boiled down the decoction again, and poured the inky fluid on to a board to dry in cakes. That was the pigment, that also was symbol of the reality, of the satisfying quality, the comfort and the proper humanity of the scraps I had picked up and the scrap I had with me like a fetish.

The weight of the glittering Capitol or no, almost all the buildings of the modern European-America, from coast to coast, however new, however bulky and monumental, however tall, appeared to me to sit lightly upon a raw, incomprehensible or uncomprehended continental enormity, not as tame as you might think. Charles Dickens, I discover, had the same feeling when he visited America more than 100 years ago. The white wooden houses of New England, he wrote, were 'sprinkled and dropped about in all directions, with-

out seeming to have any root at all in the ground?. And after I had visited Puyé (which is not by any means the most extensive or most impressive of the Indian ruins of the south-west) this lightness or superficiality or rootlessness of Europe transformed on to America terrified me the more. Many thousands of years have gone by since Asiatics crossed into America, by the Siberian-Alaskan land bridge; 100 years since most, fifty years since many of their European successors arrived. The later newcomers settled down to work out a vast technology. This technology and the unpeasant-like farmer ignore the land except as a factory food-giver; the Indians developed out of the land. On the journey to Puyé it is possible to visit modern Indian villages, San

Idelfonso or Santa Clara. vallev settlements adobe houses in which a sadly altered but still, to the Indians themselves and to spectators, a more or less satisfying Indian culture survives. Before the Conquest, these Pueblo Indians lived on maize, beans, pumpkins. These at least were the food plants they grew, poor relatives of the greater maize civilisations of Mexico. The Spaniards taught them-against resistance at first—the value and cultivation of wheat. oats, barley, chilli, onions, peas, water-melons, and musk-melons, peaches, apricots and

which only widened without greatly altering or damaging the basis of their culture. The second coming of the Europeans introduced shop food, flour ready-made, sugar, bacon, lard, and food in tins. Within memory the finger nails of the older Indian women were worn down by grinding cereals between a stone and a stone. In the Art Shop of one pueblo I looked at the delicate fingers of the Indian girl, college educated, who wrapped up pots for a tourist. I suspect, too, that shop paint-brushes are used now to apply the debased designs to the debased pottery. The early paint brushes were the needles of Yucca baccata, the plant we know in our gardens by the sinister name (if you recall the history of New Mexico) of Spanish Bayonet. From the Spaniards each pueblo has its chapel, in which the Virgin and Christ and the pueblo saint are accepted, but as guests. Out of sight and underground in the kiva, or ceremonial house, much endures of the Indian religion which tied together man, universe, and environment. And it was not so long ago that the helpers at a birth divided the navel string with a burnt corn-cob.

That was done, at least, by midwives at the modern pueblo of Santa Clara, whose people believe themselves descended from the medieval townsmen of Puyé.



Threshing grain (by the trampling of horses) in a village in the Sangre de Cristo mountains, New Mexico



Ancient cliff-dwellings near Taos

Forty years ago, when archaeologists proposed to investigate Puyé, the Indians of Santa Clara objected; though they were won over when the archaeologists maintained that the investigation would do honour to themselves and their ancestors.

The modern pueblos are in the valleys by water. The old pueblos are higher up, and were deserted probably because of a gradual desiccation of the fields. Either way, the country looks like desert to the European, though the proper description is arid—arid, dusty, poor; earthy and then rocky destitution. Mesas rise up above the valleys, flat chunks of rock. The country between mesa and mesa has been eroded. Climb the escarpment to a plateau, covered thinly with piñon (a small pine) and with juniper. The dark piñon trees and the dark junipers look like grazing buffaloes in an old lithograph. Ahead comes the wall of another mesa, another table; and in the magnificent sunlight, in the clean absence of an intervening atmosphere (you are 7,000 feet above the sea), the black openings of the cliff dwellings of Puyé are sharp and inviting. Here on the dry face of the cliff begins—only begins—the prehistoric settlement of the Santa Clara Indians, abandoned some time in the sixteenth century.

Houses in the Rock

The valley pueblos are made of adobe-mud and straw. Here the buildings were made of tufa, volcanic ashes welded into rock. The cliff is tufa; and it was now, in the warm winter sun, a pale pink. Blocks of this tufa are so porous and so light that you can lift with one hand—to your surprise—a piece as bulky as a large typewriter. The cliff is terraced from end to end, for about a mile. Houses by the hundred had partly been built out on to the terraces, partly dug into the cliff, into the soft rock. Small, black, shadow-filled holes pock the lucid face in straight lines, showing how the timbers of the roof were carried over the terrace. The chambers dug into the rock are ebony with ancient soot. In one of them, boxes remain cut out of the rocky floor. In these, in their soft dust, lie the rubbing stones of tough basalt which the women used for grinding the maize. Under the shrivelled, yellow-fruited cactus plants you can pick up by the pocketful chips of obsidian, like bits of black glass bottle, of which the Indians made their knives. By the pocketful you can pick up those sherds, dull red, or white scrawled with nervous fragments of design -sherds of vessels which had been filled with water, maize, sunflower seeds, and the little, greasy, turpentine-tasting piñon kernels which they still sell in the candy shops of Santa Fé and which are still eaten in the modern pueblos. One of the dried-up plants abundant over terrace and rubble was "that Cleome from which the pigment was derived for the black designs.

The mesa table, the upper plateau, you reach up the cliff by ladder and path, little guessing the surprise above—an acre or two more of dwellings, of small rectangular roofless houses on the level, like a draught-board on which each square is black with shadow and edged with the lightness of the tufa walls. The houses are laid out around a plaza. Underneath this empty space, the round kiva has been cleared and re-roofed. A ladder descends into the dark interior of ancient ceremonial, down into the living rock. What went on in the kiva, what goes on now in the kiva of each inhabited pueblo, has never been revealed. Up here, from these houses, this kiva, this table of rock, a panorama wheels round enormously. The table is narrow. You look one way across the volcanic expanse towards Colorado, then across the plateau underneath you look to the snow and azure of the Sangre de Cristo Mountains. More mountains rise south and west.

I reached this high point in the delicious air and the perfection of light after travelling through enough American cities and over enough of the continental surface of the States to need a reminder of ancientness and traditional culture, to need a re-injection of the feeling of what is permanent, more or less. Take these points severally. Urbanisation, industrial urbanisation and suburbanisation—these are bad enough in Europe. On a raw continental spread they take on a new dimension of terror; not lessened by the indifference to proportion and grace and relation with man which marks the American city or the small town or the single dwelling. In Europe, with its old parapets, there is always, even in Sheffield, or Liége, a tension between disgrace and grace. Not everything is of an age, variety counteracts uniformity, natural or semi-natural scenery of a kind comforting to man interrupts in a way rare through America, where natural scenery inclines to be enormously uncomfortable. The way Europeans build, even now, the sites they choose—way and site speak of centuries and of intimacy with a landscape which invites intimacy and love (contemplate the surface

of Italy or the houses in landscape of a Quattrocento picture). The light perching of an American building on the American surface speaks of years by tens and not by hundreds, of a country not really known which forbids intimacy.

'Bubbles of Dust'

The adobe buildings of the Spanish or Indian-Spanish tradition, in Santa Fé or Taos, in a Spanish-seeming environment, the adobe buildings of the Indian pueblo, are not architectural beauties, on the quickest or most prolonged inspection. But whereas urban America, American America, has a flimsy ugliness of unreality, the adobe buildings grow humpily out of the ground, into the shade of cottonwood trees. Rounded and squat, they seem to have pushed out like bubbles of dust or like the first knobs of bracken. They are real, appropriate, human. Even more so these ruins at Puvé, of a petty culture, yet of an America before the Europeans made entry or took possession. And was it fair to say, except in quantitative terms, a petty culture? Not if you contrast the everyday objects of Puyé with the everyday objects of industrialism and urbanisation (I am thinking of the food and storage vessels, the sherds scattered about, the admirable pots which the excavators of Puyé discovered and placed in the Santa Fé museum), not if you compare the siting of Puyé to the siting of American towns, not if you compare Puyé's relationship with the mesa top, the cliff, the plateau underneath, the mountain panorama which encircles it, to the way in which Chicago, Philadelphia, or St. Louis has swamped all vestige of such relationship. Chicago has not so much in common with Puyé as Puyé has with Salzburg or Bath or the peasant villages of Europe.

Allowing to the full for America's extent and the way in which that floors or twists the newcomer's discernment, allowing that some monotony of landscape and building must be inevitable on so huge a territory, allowing that only our technology could have subdued America, so much as it has been subdued, to human usages, still I cannot question that the European's first reactions of dismay are justified. Here he sees for the first time what happens when so much of human habitation begins with technology instead of having technology grafted on to its millennia of evolution. Here he sees how technology will mangle his own environment unless he accepts the warning of the U.S.A.

If you burn piñon wood, it makes the sweetest smell like incense. Newcomers who go into an Indian village sometimes think this scent they are greeted with floats into the clean air from the Catholic chapel; and then they realise it comes from every house around the plaza. A lorry bumps into the pueblo, an Indian whose plaits are bound with coloured cloth jumps from the driving seat and unloads the piñon logs and begins to cleave them with an axe. With such logs carted on the woman's back, with this sweet piñon smoke, the cooking chambers in the cliff were turned to ebony. On such an evening as the one when I left Puyé, when there was no wind and only a few clouds on the horizon, the whole long face of the cliff must once have been scented like an open-air mass, and have been faintly blue with smoke curling out of the rock. The scent of an uninterrupted, integral culture, woven seamlessly into the environment by which it was fashioned and toned. The sun would sink, as it was now sinking, behind the mesa, the mountains of Christ's blood would be turning then as now from blue to violet, to red, the red light would rise to the clouds whose lines would suddenly become pink and purple fuchsias; and the Indians would draw up the ladders and retire from the sudden drop below freezing point into the warmth behind the terraces.

The Reality?

A sentimental vision? I do not think so. At any rate I left Puyé in such a brief, irridescent, explosive New Mexican sunset, bumped down the track to the great highway to meet a stream of cars running nose to tail. Whose cars? My driver pointed to a single plume of another smoke rising over the mesas into the sky. It came from the atomic station of Los Alamos, that new hatchery of the wonders and also the destructive abominations of the technologist. And these motors, spread like beetles across the uncorrupted desert, were carrying the atomic commutors home from Los Alamos. Was that real?

-Third Programme

Among recent reprints are: Christopher Isherwood's Mr. Norris Changes Trains and The Memorial (Hogarth Press, 8s. 6d. and 9s. 6d. respectively), and, from Chatto and Windus, William Faulkner's Light in August and a revised and enlarged edition of J. R. Ackerley's Hindoo Holiday (12s. 6d. and 10s. 6d. respectively).

On Human Love

By the Rev. M. C. D'ARCY, S.J.

Y subject is an Essay on Human Love by a French thinker, Jean Guitton*. He wrote it while a soldier in barracks and in a prison camp. It has the quality of solitary thinking, when stone walls and iron bars prove for a quiet mind a hermitage. The subject of love is an awkward one. I once wrote a book called The Mind and Heart of Love, and I am told that some unfortunate folk, off on a holiday perhaps, bought it under the impression that it was a novel or something sensational. They must have been disappointed, and they did not increase the sales of the book much. But the incident illustrates the difficulty.

The Unsavoury and Over-Emotional

'Amour, toujours l'amour'; there is the ridiculous, if not unsavoury, side; then there is the over-emotional, and how embarrassing can be the placard with some Gospel text on it made vulgar and meaningless. Guitton's thoughts are quiet and philosophic; they are the reflections of one who is captive in body but not in mind. He feels that love has lost some of its mystery and glamour in the modern laboratory, and novels like The Naked and the Dead and From Here to Eternity have left little room for high sentiment. Some modern novels are so realistic that they seem to remind us of the midden more than the mid-heaven. But he reflects, apart from religious and mystical books, how few there are even in the past which have made a study of love and tried to assess its nature. Plato wrote a book about it; St. Augustine described its phases; but few philosophers have paid much attention to it. They were too interested in ideas. Even Abelard, a notorious lover, preferred to write on logic. Perhaps, as I have already suggested, the subject appears unmanageable, as variable as a woman, and as irrational (how stupid men and philosophers can be). Besides, as Lacordaire said, love has only one word, and it never repeats itself.

Another reason may be that the attitude to love has, as Guitton remarks, changed with time. Love was always there, but as strange as a unicorn, and in past times it led men a dance, away from wedlock and the home. It was a satyr, a cupid, a Venus; even to a Plato love is a madness or a means to lift the soul up above the transitory world into the region where beauty abides. What we forget is that we are the beneficiaries of a long experience and tradition, and that the Christian ideal of marriage and Agape dispelled the mists round the slopes of love and revealed the mountain tops. But we do not grow a second nature in a day, and the idea that a woman is man's equal, that the body is akin to the spirit in goodness, and marriage the true human consummation of love, met with a long resistance. Lovers continued to despise contracts and the birth of children and the chores of home. The troubadours in the supposedly orthodox Middle Ages sang of fair women and illicit loves, of the Tristrams and Iseults; and the Gnostics hated the body and carnal joys. Lust, too, takes a lot of training. So it is that, accustomed as we have become to think of marriage as the target of true love, we forget that it was not always so and that the ideal has always been in danger. What Guitton feared in his prison musings was that the ideal may grow misty again now that the background is fading, and love becomes a matter of calculation and the cold dissection of the biologist and psychiatrist.

To him the most striking and enigmatic feature of human love is its intimate connection with sex and birth. There is no necessary physical or biological reason why this should be, and there are many signs that man is often ashamed of it. Nature has provided so many possible modes of reproduction of the species: witness the bees or the aphis which multiplies usually by pathenogenesis. So uselessly complicated is the human mechanism that it is a scandal to Darwinians. There is no need for the work to be shared, and so unequally shared. Why again, as happens with many animals, should not the instinct for generation have its times and phases and then die down? (As Thomas Grandaye said, according to Taine: 'I have reduced love to a function and that function to a minimum'.) One answer is that human sex life does provide for the permanence of the species and the

variability of the individuals. But to Guitton the clue lies in the mounting impetus of love, the way, that is, in which what is vital is transformed into what is human and spiritual. It is as if the lower animal forms of love were not fully intelligible in themselves; they prefigure what is to come and must be viewed as preparatory to that. This, though Guitton does not say so, is evolution turned upside down, or rather it supplies that key to real development which is missing in the too materialistic explanation by chance-variation and the principle of adaptation. There is adaptation, selection and a struggle for existence, but the struggle is not negative; it is a constant forecast of what is to be.

Even in human life Guitton thinks we can observe this process taking place. The animal instincts in us are humanised, not eliminated. Out of bodily appetite we can make an art, a symposium, and our of bodily movements and primitive cries and sounds the beauty of ballet and music. So, too, the vital energies of love are transfigured and a perfection descends upon what in animals we call mating and amongst humans, marriage. Love, because we are body-spirit, is better off in the society of another and in a family than in romance or in Platonic dreaming. It is to the beloved whose hand we have taken, not a day-dream, that we declare that 'nothing will break the winnowed purity of love', that it will endure 'when time is old and hath forgot itself, when water drops have worn the stones away and blind oblivion swallowed cities up'; and in this moment all lesser loves confess the secret they were intimating. This may sound highflown, but it is only the Shakespearean version of the marriage rite: for better, for worse, for richer or poorer, in health or in sickness, till death do us part. The last clause is just a sop to Cerberus.

Such is the upward path of love, so Guitton maintains, and in confirmation he points to the unexpected variety, the different shapes it takes in man and in woman, in youth, in the prime of life, and in old age. So far from being just a gratification of the body as Ovid and Catullus and the libertines like to call it, it moves from position to position with the strategy of an army well led. Time takes away our strength and many other things—pereunt and reputantur—but love adapts itself and stays. Those who have grown old and kept the rules know this. They feel as though they had been led on despite themselves, as if there were some guardian genius of the species manipulating the lottery. Nature is not acting blindly. The love celebrated in ballad and epic is not a by-product of sex; on the contrary, sex is the ordained means of lifting love up like an Olympic torch in that strange mixture we call human society. It is also the herald of something greater than itself. To biologists its wanton extravagance may seem puzzling, if not shocking. Not so, if as this essay on love suggests, its end is to unite nature and spirit, enabling the race to continue and the individual to touch the hem of spirit. Traditional Christian teaching is on Guitton's side; it says that the end of marriage is first the begetting of children, but it also assigns a peculiar value to the expression of love. As mankind has developed, bodily functions and gratifications are elevated into arts and then are loved for their own sake. Knowledge, for instance, is an end in itself, and human love, when not divorced from its proper purpose, can be enjoyed for its own sake as the supreme experience. unifying and creative.

Two Forces

I say unifying and creative and here touch on something Guitton does not dwell on. Love can be very possessive and also very wanton, masculine and feminine. There are two springs or forces of love, like the positive and the negative in electricity. The one in its origins is rampant and grasping; the other compliant and self-stripping. As such and unchecked they belong to the farmyard, but in man they are transposed into a higher key. The animal is still there, of course, and man can be brutal, incontinent, and overbearing, but it is in seeking himself in his pleasures that the one love is more prominent, and in reckless abandonment and in being captivated that the other love gives itself (continued on page 302)

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NEWS DIARY |

August 13-19

Wednesday, August 13

Confederation of Shipbuilding and Engineering Unions agrees to meeting with employers on wage claims

In riots near Alexandria textile workers set fire to mills

Belgium decides temporarily to reduce period of conscript service

Thursday, August 14

General Neguib makes statement about the labour disturbances in Egypt

British Chargé d'Affaires in Teheran sees the Persian Prime Minister

British Transport Commission gives details of fare changes to be made at end of month

Friday, August 15

General Neguib gives warning that he will not tolerate disorder in Egypt

Severe thunderstorms cause dislocation and flooding in southern England

New television transmitter opened at Wenvoe, South Wales

Saturday, August 16

Seven people are reported to have lost their lives and thirty-eight reported missing in floods in north Devon and Somerset

Minister of Agriculture rejects application by National Farmers' Union for a special review of agricultural prices

Sunday, August 17

H.M the Queen sends message of sympathy to relatives of those who lost their lives or are homeless in flood disaster in Devon and Somerset

Duke of Edinburgh attends opening of the Edinburgh Festival

Chinese delegation, headed by Prime Minister, arrives in Moscow

Monday, August 18

Minister of Housing and Local Government visits flooded areas of Devon

Leader of Egyptian rioters sentenced to be hanged

Inter-governmental copyright convention opens at Geneva

Tuesday, August 19

County Surveyor estimates cost of restoring public services in North Devon flooded area to be £2,000,000

U.N. aircraft attack munition factory near Manchurian frontier

Coal strike affects 7,000 men in South



Scenes of destruction in the north Devon village and holiday resort of Lynmouth which was devastated by floods on the night of August 15-16. Above, the torrent rushing through the centre of the village after the West Lyn river (swollen from the flooded streams of Exmoor, where nine inches of rain fell in twenty-four hours) had burst its banks and torn itself a new course. Above right:

the wreckage of a car amongst boulders and rubble washed down by the flood



The scene on the Castle Esplanade, Edinburgh, during the opening ceremony of the Sixth International Festival of Music and Drama on Sunday. The ceremony, which was preceded by a service of dedication in St. Giles' Cathedral, was attended by H.R.H. the Duke of Edinburgh and the representatives of thirty-seven overseas countries





the Bristol Britannia, taking off from Filton airfield, Bristol, on Saturday, on her itannia has a range of about 6,000 miles; it can carry 100 passengers and is sected to be the most economical type of airliner yet produced





Rescue workers in Lynmouth digging for people believed to be still buried under the ruins of houses and hotels. By August 19, the death-roll was thirteen, with twenty-five people still missing



Icefields and mountains photographed from one of the R.A.F. Sunderland flying-boats which are assisting the British North Greenland Expedition in the establishment of a base camp at Britannia Lake, 888 miles from the North Pole. Throughout this month the Sunderlands are making four flights daily from Young Sound on the north coast of Greenland with stores and equipment

Left: the entrance from the River Yare to the 200 acres of marshland and waterways at Burlingham Broad which are being acquired by Norfolk Naturalists' Trust as a nature reserve

(continued from page 299)

away. These are the excesses. The virtues come out in true love, in that honour and purity and self-respect which are completed by generosity, affection, and self-sacrifice. Each says, 'What is mine is thine', and what is mine is in truth worth giving; each appears to lose and does not think of gain, but each gains by the loss as the love is unifying and creative. Such a love is permanent because unconditional, and single because neither holds anything over; and it solves the problem of egoism and altruism, of self-realisation and self-sacrifice, so far as it can be solved in this life.

And now, when love is being dissected in the laboratory and its supposed roots explored by the psychologists; when, like Samson in Gaza at the mill with slaves, it is shorn of its beauty and used as a commodity of the state, Guitton hopes that the rich beauty of conjugal love will emerge as a challenge and inspiration. Its value is inherent in the Christian belief, but in the past *Eros* was so untamed that the claims of *Agape* and unworldliness had to be put in the forefront. Married love looked like a domestic and a little drab. Human love is subordinate to the divine, and just as flesh is only truly flesh when it obeys the spirit, so human love is only true when it relates itself to a heavenly one. Sacrifice, essential at each of these stages, does not harm; it saves. But in the past, while Christianity saved true love, in order that *Agape* should shine in its true glory, *Eros* had to be treated as a coloured person. But *Eros* can be and has been taken into the Christian ideal, and it may be that a new development is at hand, and the

mystery of marriage is to have its epiphany. What we do know is that human love has not completed its career. By its very nature it renews itself, meeting unknown problems with ever new responses; in every new crisis it assumes the grace of dawn and of a new venture upon the way of peace and promise. In this, love and hope are akin.

If we are to believe St. Paul, such a union is a symbol in turn of the Christian mystery of the union of God with man, and we may add of that distantly shining mystery of the Divine Trinity, where God is Himself utterly undivided just because love begets, and the begotten is one with the begetter in a personal love and life. So 'the fickle light of human love is won by faltering reflection from the Sun'. Today the wiser among philosophers are looking to the idea of 'person' as the key to wisdom and the signature tune of the universe. Persons, not minds or brains or electronic calculating machines, stand behind everything, and love unites them and generates them. Guitton has a fear that in this age, top-heavy with science and sophistication, the spontaneity of love may suffer an eclipse. He is thinking of impersonal states and animal farms and the calculating and planning of family life. But human beings have a wonderful gift of adapting themselves, and true knowledge is always a gain; so perhaps with the Highest Love before our eyes we may reach out to a still better understanding of love, its joys and obligations. 'Fairer to me'-if I may end with the words of a long-dead genius in love—' such understanding than Thisbe, than Pyramus, than their Venus and Cupid and all such loves?

-Third Programme

Are There Eternal Truths?

(continued from page 284)

varied during that time in inverse proportion to the age of the universe, as most of the cosmologies other than Eddington's assert that it should have done. If this is so, it implies that the cosmical number does not vary in time: that it has always had the same value as it has now, and therefore there is no difficulty on this score in accepting Eddington's value. Since the amount of matter in the universe depends on the cosmical number, it follows that the amount of matter in the universe does not vary in time, and therefore that the hypothesis of continuous creation is inadmissible. While it would, perhaps, be premature to regard Dr. Teller's work as conclusive, I think we are justified in saying that the empirical evidence, such as it is, favours the views of Eddington rather than of those cosmologists who differ from him. Every one of these theories is, however, of such high intellectual interest that one regrets they cannot all be true.

We have, then, now concluded that science furnishes at least one eternal truth which we can possess here and now, namely, the existence and value of the cosmical number; and after this, we find little difficulty in making other applications of Eddington's Principle and admitting other eternal truths. Not only so: but we feel confident that the universal laws of nature, which as yet we know only in forms liable to modification, correspond to a system of eternal truth to which our successors will continually approximate. We can accept the conception of a rule of law, in itself timeless, which is intelligible to our minds and which governs all the happenings of the material world. This is the spiritual aspect of physical science.

We are so used to the idea that science has progressed gradually from nothingness to its present state, that it may be well to point out that the eternal truths of science have a different character: they are not the result of a process of development, but reach backwards into an eternity of the past as well as forwards into an eternity of the future. Men lived in the midst of all the potentialities of nature for countless generations, unable to use them for want of knowledge: the laws of electricity were as true in the age of palaeolithic man as they are today: the natives whom Darwin found at Tierra del Fuego eating raw shellfish off the rocks might have been supported against the rigours of the climate in electrically-heated dressing gowns if they had known more about laws that were already in existence. What is known even now is only a very small part of what is waiting to be progressively unfolded.

But while through the material universe we have learned to lay hold of something changeless and eternal, science teaches us that the material universe itself is not changeless and eternal: cosmologists say that the age of the material universe is perhaps no more than 3,000,000,000 years, and that it is running down like a clock, so that after a certain time it can no longer be the abode of life. We stand in awe before the

thought that the intellectual framework of nature is prior to nature herself, that it existed before the material universe began its history.

From the standpoint that we have now attained we can take a more general survey, and consider whether it throws any light on some recent presentations of the philosophy of religion. The philosophical work of my old friend and teacher Alfred North Whitehead is justly regarded as the most important metaphysical achievement of the present century. Whitehead affirms that metaphysical principles are just truths about the nature of God: so his system must be described as theistic. His God, however, bears little resemblance to the God of either the Jewish or the Christian religion. Whitehead's God is not omnipotent: He is not the whole of Reality, and His nature never reaches completion, but is always being completed by the creative passage of events. God and the world are, in Whitehead's phrase, instruments of novelty for each other.

The notion of a God who is subject to limitation is a very old one: in the Stoic philosophy of the ancient world, the Supreme Being was conceived as under the sway of Fate; behind the throne of Zeus stood Moira. The emergence in the twentieth century of a doctrine having some resemblance to this leads us to inquire what led Whitehead to adopt it. I think that its presence in his system may be traced to his way of regarding God and the world-process as bound up with each other, and, so to speak, co-eternal. But as we have seen, the world-process has a beginning and an ending, while God, whatever other qualities He may or may not have, is certainly eternal: He has neither beginning nor end. The material universe known to us, far from being put on the same level of permanence as God, cannot be regarded as more than one of His dispensations: perhaps not the only one.

We have, however, seen that material nature has made manifest to us realities greater than itself, eternal truths which are unlike material nature in their purely intellectual and universal character, and which are timeless, in contrast to the transitory universe of matter; and they point to a God who is not bound up with the world, who is transcendent and subject to no limitation. The principle that matter exists not for its own sake but in order to help us in bridging the gulf that separates us from the divine, may be expressed in theological language by saying that nature has a sacramental quality: a principle that has long been recognised in religion, and can now be admitted to be not alien to the philosophy of science.—Home Service

The above talk is based on Sir Edmund Whittaker's Eddington Memorial Lecture, Eddington's Principle in the Philosophy of Science, which has been broadcast in the Third Programme, and is published under that title by the Cambridge University Press at 2s. 6d.

Letters to the Editor

The Editor welcomes letters on broadcasting subjects or topics arising out of articles or talks printed in THE LISTENER but reserves the right to shorten letters for reasons of space

Two Communist Capitals

Sir,-From Mr. W. Grigor McClelland's description of his visit to Moscow and Peking, he received somewhat different impressions from mine when I made the same journey just over a year ago, as a member of an 'official' delegation of the International Union of Students. We, too. staved overnight at Novosybirsk, but, unfortunately were not taken on a tour of the city. Mr. McClelland noted that 'in Peking the posters teach elementary habits of hygiene'. One of the big impressions that I formed from my visit to Peking was of the anti-western hate posters and exhibitions everywhere in the city. As part of the official Communist brainwashing campaign, this might, of course, be construed as teaching elementary habits of hygiene'

It must be a comfort to many that Mr. McClelland feels that 'compulsion is not as widely used as we sometimes think in Russia or China'. It must be a comfort to many to know that, by the logical extension of Mr. McClelland's argument, they really deserve to be dismissed their jobs, have their children victimised, be imprisoned, be sent to 'corrective labour camps' in Siberia and elsewhere, simply because their officially 'wrong thinking' was really caddish

Mr. McClelland is not alone in finding people enjoying themselves in Irkutsk-I noticed it, too. But what does a transitory visitor expect to see? But it should equally be remembered that there are other Siberian 'resorts' which do not appear so pleasant to their enforced inhabitants. Though neither of us, naturally, came across such places, there are plenty of others-far too many-who know them at first-hand and who have different ideas from Mr. McClelland why the majority cheer at mass demonstrations in the Communist world.—Yours, etc., London, W.C.2

TOHN CLEWS

Partnership or Interdependence?

Sir.-Mr. Boris Gussman's statement, 'In Southern Rhodesian towns some fourteen different passes are required by an urban African leading a normal sort of life', in his broadcast talk on 'Partnership or Interdependence? (Third Programme), is grossly inaccurate. Mr. Gussman visited Southern Rhodesia in September 1948; like many another critic of Central African affairs, he makes statements which are out of date or based on poor knowledge of the subject.

The ordinary rural African only requires a registration certificate (which is the counterpart of the identity certificate still needed for some purposes in Great Britain), and the ordinary urban African requires a registration certificate and one pass. In every case a pass is designed to aid the bearer; how else could a largely illiterate set of persons be identified in moving around the country? It must be noted that an extensive class of educated and responsible Africans is exempted from the pass regulations.

Passes in use today are issued as follows:

Every African male adult or employed juvenile must have a registration certificate. The rural African requires no passes unless he wishes to visit or settle in a town.

The African entering an urban centre requires either a pass to visit or a pass to seek work.

The African obtaining employment has his pass to seek work replaced by a working pass.

Apart from this working pass, which is also known as a 'Working Certificate' or a 'Contract

of Service', he has to have, when needed, a permit to be out of his quarters between 9 p.m. and sunrise

A permit is required to enter an urban Native area by anyone not ordinarily resident there.

There are one or two minor passes or permits such as a permit from an employer for travel by rail or public transport or to drive stock by night. There may be ad hoc permits informally issued by employers, but these, too, are there to aid rather than to fetter the bearer.

In no case does any African have to carry the variety of passes suggested.

Mr. Gussman is obviously out of touch with present-day wages in Southern Rhodesiá. It is necessary here to point out that, low though they may seem by present-day European standards, wages in nearly all African territories have always been related to standards of living as 'well as to productive capacity. Minimum standards of wages, gratuities, payments for overtime, leave, rations and quarters or cash allowance in lieu-thereof, and fuel allowance have been laid down by the Government of Southern Rhodesia under the Labour Boards Act and apply in all areas under the jurisdiction of a local authority and within a distance of ten miles beyond the boundaries of such areas to all workers other than those engaged in farming, mining, domestic service, institutions, and government service. The benefits of free rations and quarters are also customarily applied to nearly all other African employees.

Some figures may be of interest. Unskilled workers earn the following monthly minimaand it must be stressed that these are absolute minima and that the great majority of Africans receive a basic wage in excess of that laid down:

Domestic service, 35s. to 120s. (average wage 55s.); railways, 37s. 6d. to 67s. 5d. (57s. 6d.); shops and offices, 37s. 6d. to 90s. (50s.). If accommodation is not provided an allowance is made for it to an amount not exceeding 15s, a month. In addition to the basic wage, there is a ration allowance of 33s. and a fuel allowance of 7s. a month payable, when these commodities are not supplied in kind.

Skilled and semi-skilled workers earn much more than Mr. Gussman suggests. The following figures are taken from Industry, Number Five, in a series of eight booklets which the Government of Southern Rhodesia is publishing to show what has been and is being done for the African:

Garage work, £4 to £8 (average £5); furniture industry, £5 to £15 (£8 10s.); Government services, £3 10s. to £17 10s. (£8); motor trimming, £4 to £12 10s. (£5 10s.) Exceptional wages in these four categories are, respectively, £15, £25 10s., £31, and £37 10s.

Southern Rhodesia's policy for the welfare of its Africans, as the Prime Minister, Sir Godfrey Huggins, recently repeated, is bread first, a vote and trade unionism second. Last year every European man, woman, and child contributed £25 10s. a head to African welfare and the services mentioned by Mr. Gussman in his broadcast; the African himself contributed only 9s. per head—a figure unchanged from 1950 when the European contribution was £24 15s. Allowing for the disparity between 150,000 Europeans and nearly 2,000,000 Africans, it must be admitted that the main burden for African development is still being borne by a small European community.-Yours, etc.

London, W.C.2 J. A. KINSEY First Secretary, Office of the High Commissioner for Southern Rhodesia

Place in the Sun

Sir.-Permit me to draw attention (as a farmer) to a fairly risky jump made by Professor Ashby in his talk, 'Place in the Sun', reproduced in The LISTENER of August 14. There is an implied confusion of terms on actual 'ground level'; and any unclear thinking in the fundamental realm of food production appears to be dangerous in the light of the future food requirements of mankind.

Poor husbandry—page 263: It is now well known that without a full humus content in soil there cannot be a 'healthy population of microorganisms'. The early pioneers of chemical farming did not consider this subject. If the number and health of the micro-organisms is to be the hall-mark of good husbandry, humus must be used. We all know we can get fair yields when using hydroponics, if we do not worry overmuch about the micro-organisms and our grandchildren: therefore, is the chemicals-pluswater system had farming?

On Professor Ashby's terms it would seem that the real farmer must also be a tolerable plant physiologist, inasmuch as he should be concerned with soil health and structure, quite apart from

plant health and vigour.

It is almost impossible to avoid sour, waterlogged soil in high-rainfall areas without sufficient humus content; this is practical history: dead, wet soil packs; dead, dry soil blows; wherefore the invention of krilium: is this not

As regards deep rooting plants: it is now known that NPK chemical agriculture actually changes the habits of deep rooters; apparently nature takes the line of least resistance and feeds off the chemicals given instead of going down to the subsoils for the natural chemicals.

It would seem that Professor Ashby's methods for increased world production will lead to soil impoverishment and world-starvation within another 100 years; he appears to advocate living off soil capital; he has said nothing about the preservation of the oecologies. And he seems to have disregarded the considerable mass of evidence now obtainable in this country and in America which points to successful reclamation of derelict farms by the intelligent use of humus, rotations, and biological awareness.—Yours, etc., Llandegfan C. A. M. WEST

Round the London Galleries

Sir.—Attack the intellectuals and raise a hornets' nest. They gather round to protect their kind. Mr. Sylvester was unfortunate to be in the front line at the time of attack, but it is not the insincerity of this small group of intellectuals that is so much in question, but their right and ability to set themselves up as authorities on the

If I suggest that in Mr. Clark's quotation of Herbert Read 'The final source of power in the artist is given by society, and that is precisely what is lacking in the modern artist', the word society should read 'Herbert Read and his friends', and 'necessary to' instead of 'lacking in', and the case is in a nutshell. Only the other day in The Times, Mr. Read, as chairman of the Contemporary Arts Society, was quoted as saying, 'The aim of this body is to bring into existence the art of the future

Probably Mr. Craig and Mr. Clark would accept this as the party line, but does Mr. Waring or any intelligent person believe that a bunch of critics and amateurs have the right or the ability to take on such dictatorial powers. Would not Mr. Waring agree that if the Astronomer Royal was confronted by a group of people whose only qualification to dictate the procedure in astronomy was a conceit in their own discernment he might resent their interference?

Mr. Waring and many honest people are no doubt impressed by the position of some of the supporters of this modern movement, and the authority with which they speak. It should be remembered that these writers and talkers on art would not be the first pundits in history, who, loaded with honours, full of their own importance, oozing with self-satisfaction and assurance, have marched steadily down the wrong road and to eventual obscurity.

Both Mr. Craig and Mr. Clark, of course, belong to this small band of intellectuals. I could have written their letters for them. They are both sure that I cannot understand the complexities of the problem. It is quite possible neither can draw a line, and I should suggest that Cromwell's pleas as quoted by Mr. Clark, 'Conceive it possible that you may be mistaken can always be applied to both sides. For myself, I have considered it very carefully for over thirty years and have come to the conclusion that the intellectual group is a decadent influence.

As I said in my first letter, it is difficult to see how this thing can be stopped. The phalanx of would-be superior people cluttered round a few forceful personalities, together with the vested interests naturally attached to such bodies, is almost impregnable. Apart from thunderbolts.

Personally, it is a pleasure to kick it now and then.—Yours, etc.,

London, S.W.3

HENRY CARR

Science and Art

Sir,—In The LISTENER of August 14 Mr. David Waring describes his bewilderment at the different responses accorded to scientific and aesthetic controversy. This bewilderment should be removed by reading the penultimate sentence in Lord Russell's letter published in the same issue. Artists, and particularly art critics, concern themselves with ultimate problems; scientists do not .-- Yours, etc.,

Manchester

JOHN K. PITTS

Rupert Brooke

Sir,-Mr. Patric Dickinson's 'Estimation' of Rupert Brooke, to which I listened with great interest and no little pleasure, was so characteristic an essay in fashionable criticism that you will, I hope, agree that it deserves brief discussion. Mr. Dickinson began by making a great show of exploring a 'lost world' which puzzled me because all artists, except living ones, belong to lost worlds and, surely, it is the everyday job of a critic to make allowance for changes in historical setting. The period before the first war was different from today, but so was every earlier period. Having sowed this seed of gratuitous strangeness in the minds of his listeners, Mr. Dickinson went on to describe Brooke as the victim (I was not quite clear how) of his mother, of a frustrated love affair, and of some sort of connection (I was not quite clear what) with homosexuality. 'Granchester' was dismissed pretty scornfully and emphasis laid on the significance of 'A Channel Passage' and on 'Tiare Tahiti'. The poet was stated to have found in the South Seas a fulfilment that had been denied to him at home in Rugby. Sir Edward Marsh came in, from time to time, for some sharp canings.

With much of what Mr. Dickinson said and with his selection of poems for reading aloud, there may be no positive reasons to quarrel. The readings were admirable—as have been many of the B.B.C.'s recent adventures in this hard and rewarding art. What I venture to question is whether, in his anxiety to explore the bag for all possible cats, Mr. Dickinson kept his balance. The sex experiences of the poet, who died young, obviously affected his work, but is that not a commonplace and transparent in the work itself? Can it be maintained that a man who had been through the trying experience of school days under his own father, had been a highly successful member of the school in lessons, got into the XV and XI and then gone back as house master, was frustrated in Rugby? Of course, the South Sea islands at the age at which he visited them were a stimulus, but would he not have developed much as he did had he stayed in England?

This broadcast portrait, excellent though it was, seemed to me to lack humanism or, to use a less outmoded word, to be unscientific. Brooke's war sonnets express him as completely in one mood as do, in another, his Pacific Ocean poems. Sir Edward Marsh has to be brought in to redress the balance of Mr. Dickinson, if Brooke is to be seen in perspective and not from one, temporarily fashionable, angle. I suspect Mr. Dickinson, like so many contemporary critics, of feeling the traditional impulse to shock the bourgeoisie and, for fear that people are nowadays, more or less punch-drunk, having to fall back on the barren exercise of shocking the past. The ghost of Dr. Bowdler certainly came, in the past, between many critics and the truth, but the ghost of Dr. Freud can prove no less bulky and opaque.—Yours, etc.,
London, S.W.1
A. P. RYAN

The Architecture of Antonio Gaudi

Sir.—I do not know why Professor Pevsner, in his talk on Antonio Gaudí, loses his temper so violently with other tourists to Barcelona who, he feels will not be able to appreciate Gaudí as he, the Professor, has done. Perhaps like most critics today he is suffering from the shortage of people to convince.

There were some other mysterious points in his talk. Gaudí, surely, was not the son of a 'tinker' but of a blacksmith and craftsman in wrought iron. The detail from the top of the tower of the Sagrada Familia, illustrated in THE LISTENER was not designed by Gaudí but by one of the disciples from his workshop. The one existing facade of the cathedral is not decorated with 'a mad incrustation' but with Gaudi's version of the Naciemento (Birth of Jesus, recognisable even to Protestants), and its message to all living things. The Parque Guell was designed not as a 'a Regent's Park conception' but as a model workmen's estate with the land divided into triangles—one of Gaudi's treasured symbols. The 'apparently dead' trees in the Parque are certainly macabre, but are also supposed to be the counterparts of the 'apparently living' trees carved in stone and are another illustration of Gaudi's mania for the sympathy between all created things. The leaning columns of the market are not simply 'nightmarish' but an example of the architectural 'invention' on which he prided himself most, the asymmetrical arch.

It is a pity Professor Pevsner could not refer to some of the other Art Nouveau designs of Barcelona-such as the Palace of Music-which show even more clearly what a giant Gaudí was among architects. It is puzzling, too, to hear that the English Art Nouveau movement was 'exclusive', and, in the Professor's words, gave no pleasure to the hoi polloi. Surely, from the beginning, it was the most rapidly successful decorative style of all time, engulfing the Arts and Crafts movement and the manufacture of arty and crafty objects right down to the present

day. How many English homes even at this moment are without a shutter or a pair of bellows with a heart cut out of them, a bit of bathroom stained glass with a water-lily pattern on it, or a cloudy blue vase that keeps falling

Gaudi also designed furniture. Some of it waved, to fit the waving walls of his block of flats which was inspired by the sea. But, alas! very few of these flats retain the original decor.—Yours, etc., London, N.W.3

PENELOPE FITZGERALD

A Study of Satan

Sir,—May I be allowed one comment on Mr. W. W. Robson's excellent review of Dr. Werblowsky's Lucifer and Prometheus? We are told that 'the characteristic Hebrew sin was not hubris but sensuality': yet 'ye shall be as God' was the bait of the first temptation (Gen. III. 5 R.V.). Hubris was also the sin of the Babel-builders, which led to the confusion of tongues (Gen. XI. 6). It was the sin for which Nebuchadnezzar was punished with lycanthropy (Dan. IV. 33) and Herod Antipas with death (Acts XII. 23). The New Testament (but Hebraic) conception of the 'Man of Sin' was that he should 'set himself forth as God' (2 Thess. III. 4), and hubris was the sin that led to the destruction of the 'Great Babylon' of Revelation (XVIII. 7). The sin of presumption and pride was the constant theme of Hebrew wisdom, literature and of the Prophets.

Birmingham

Yours, etc., GWILYM O. GRIFFITH

Portraits from Memory—III

Sir,—In his letter in THE LISTENER of August 14, Mr. Victor Purcell implies that Rousseau was the author of the saying 'The heart has its reasons which reason does not know.'. The name of Pascal, who lived a century before Rousseau, is usually associated with this saying. Pascal wrote: 'Le cœur a ses raisons, que la raison ne connaît point; on le sait en mille choses'. He also wrote: 'Deux excès: exclure la raison, n'admettre que la raison'.

Pascal's name is also associated with a geometric line, the line on which lie the three points of intersection of opposite sides of a hexagon inscribed in an ellipse. This line excites the admiration of the comprehending mind, partly by the elegance of the analytical and the geometrical proofs, and partly by the surprise that the three points should lie in a straight line however irregular the shape of the hexagon. It would appear 'unreasonable' to expect that they should. Pascal's 'thought' line also excites the admiration of the comprehending mind which feels instinctively its truth, though this line, too, appears 'unreasonable'. It is, perhaps, specially significant today, written by a physicist.—Yours, etc., specially significant today, that this line was

How to Discourage Moths

Sir,—With reference to the note in THE LISTENER of August 7 on how to discourage moths, no mention was made of paradichlorobenzene crystals used in reasonably airtight cupboards, drawers, and trunks. This substance used at a rate of one lb. for every ten cubic feet of air-space gives complete protection as long as the vapour concentration is maintained at a high level. The crystals should be renewed as they vaporise away.

Yours, etc., A. W. McKenny-Hughes British Museum (Natural History) London, S.W.7

Plat du Jour-II

Grilling, Roasting, Peacocks and Royal Feasts

The second of three talks on cookery by ISABELLA VISCHER

ERHAPS you would have liked to hear about the Buckinghamshire Clanger, a speciality which, I learn, is still eaten in that county. It is a roly-poly filled at one end with bacon and at the other end with jam: the sustaining, time-saving, one-dish meal. But I would like to follow up my last talk about the omelette with another simple yet very tricky dish, also much praised and discussed by experts and connoisseurs, also requiring a certain alertness and inspiration: the grilled steak—with a few words on roasting and grilling, all being in the same category.

One reads and hears this phrase: 'A grill should be grilled' in protest against the curious leathery, or half-stewed, bits and pieces which are sometimes served under this name. Grilled, indeed! But this is not at all as simple as it sounds. Here, again, the pitfalls are many

and unexpected. Roasts may be a little less perilous, but they, too, have their secrets, and perfection is often missed by a small error of judgment. It has always puzzled me why in England, where until comparatively recently the quality of meat was by far the best in Europe, where, before rationing, it was the essential nourishment for rich and poor, so many people have a marked preference for overcooked roast. Those who like it underdone are the exception, not the majority. Well, 'L'on ne discute pas des goûts et des couleurs'. However widely culinary tastes may differ, what really matters was summed up perfectly by a friend of mine the other day: 'What differentiates us from the animal is the appreciation of a good dinner'

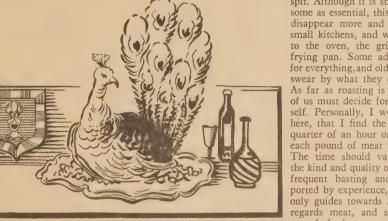
I have looked through several French-English dictionaries for the translation of the word gourmandise and I was disappointed to find again and again only the one word in English: gluttony. Gluttony surely is gloutonnerie, coarse and gross, it seems to me. A Frenchman called it the most charming of the seven capital sins. Jean-Jacques Rousseau said that a gourmand's soul resides in his palate and that he is only fit to eat. Robert de Flers remarks, in a charming introduction to one of Edouard Nignon's cookery books, that it seems a singular judgment on the part of the apostle of the return to nature. But he also tells us what Guy de Maupassant had to say on the subject a century later: 'Only imbeciles are not gourmands (note gourmands and not gourmets). One is gourmand as one is artist or poet. The sense of taste is a delicate and perfectible organ, and as respectable as the eye or the ear. To lack it is to have a stupid mouth as one has a stupid mind'.

To return to grilling and roasting. Since roasting and grilling were always linked up with hunting, with royal shoots, the feasts of kings and the most ancestral customs, this simple but noble way of preparing food ranks very high in cookery. The Emperor Aurelian, for instance, tolerated only roasts on his table. These may have been veal, kid, venison, game, or wild-fowl, but not lamb or mutton, since the Romans despised mutton. Our delicious beefsteak or sirloin would not have been on his menu, either, because the ox was almost a sacred animal under the Roman Republic. Veal was duly grilled and much liked, as is still the case today on the Continent.

In the Middle Ages, grills and roasts were in great vogue and often a dish of honour. Before all, the peacock. It was traditional and almost symbolical. It was roasted on the spit with infinite care, adorned again with all its feathers, a piece of camphorated wool put in its beak, to be lit at the last moment, like our Christmas pudding. Spitting flames, enthroned on a gold or silver plate, accompanied by music, it was carried in by the fairest of all the ladies present. If it was not the Master of the House who carved the bird, the privilege would go to the most honoured guest. Vivid interest was shown by the entire assembly of guests, and applause went to the clever carver who had the skill to cut up the peacock in such a way as would give enough for everyone present to have a taste. It was a kind of communion, where they found the power to do deeds of valour and love, and the knights pronounced the vows of the peacock: 'I vow to God, to Our Lady, to the Ladies, and to the Peacock . . .'. Opinions differ today about this dish, but 'The Viscount in the Kitchen' gives an interesting recipe and calls it succulent. It is, I believe, also a Chinese speciality, and, not long ago, I heard someone on the wireless call it an epicure's delight.

Roasting and grilling continue top of the list through the ages. Brillat Savarin said: 'One can become a good cook, one is born with the ability to roast!' 'On devient cuisinier, on nait rôtisseur'. And

the pivot of all this is, or was, the spit. Although it is still considered by some as essential, this utensil tends to disappear more and more from our small kitchens, and we have to resort to the oven, the grid-iron, and the frying pan. Some advocate the oven for everything, and old-fashioned cooks swear by what they call 'a roaster' As far as roasting is concerned, each of us must decide for himself or herself. Personally, I would like to say here, that I find the usual idea of a quarter of an hour or ten minutes to each pound of meat very inadequate. The time should vary according to the kind and quality of the meat. Very frequent basting and instinct, supported by experience, seem to me the only guides towards happy results as regards meat, and still more so as regards fowl.



And here, at last, comes the perfect beefsteak! It is untrue that it is not possible to make a good steak out of present-day rations. I have served it two or three times to two persons within the ration. But it means striking lucky with the quality, and saving one's ration for two weeks or more. A week before you need it, buy a piece of fillet, wingrib, or, if not available, of rumpsteak. Meat of the sirloin is of course best. See to it that your butcher gives you not (as he will certainly try to do) a largish, thin piece, but a very thick piece of whatever cut you are able to obtain. This, of course, is easier on the Continent, where the cuts are taken more in the length of the carcase. while in England they are taken more in the width of the animal. But I am sure that your butcher, if he is a nice man and keen on his trade, will appreciate this request and will treat you for ever after with more attentiveness and respect. Each steak must be at least three inches thick. Keep them in your refrigerator. The day before you require them, or at least a few hours before, put them to macerate in a small quantity of oil, and, if you like, a very little vinegar.

And now, follow the two essential conditions for perfection, which I owe to my friends in Normandy, who themselves had it from one of the best restaurateurs in France: first, never use butter or any fats, except olive oil. Second, grill your steak over a wood fire, or, secondbest, a charcoal fire. The difference is enormous. The fumes of the wood permeate the flesh and blend with it exquisitely.

This, by the way, is not the only example. Haddock, to be really excellent should have been smoked over the fumes of oak. This was revealed to me by a Cockney: car-breaker, dealer in antiques on the

Caledonian Market, and Jack-of-all-trades, who knew his food better than most. He insisted on buying my fish for me, when I lived in London and was profoundly offended if I showed independence and bought it myself. Whenever I did so, he would say: 'This isn't addick this is 'Jumbo-Addick'' (whatever that may have meant!) A wood fire is not at all as complicated as it sounds: I find I can make a

suitable fire in my dining-room grate by putting on both sides a support of bricks, which will hold two cross-bars over the top (a pair of tongs will do). Your guest sits at table, waiting, as for the omelette. Dry your pieces of meat, and pat your steak gently, giving it a good shape. I do not believe in hard beating, and still less in making incisions all over the surface. Your gridiron and receptacle, or your frying-pan, should be hot when you begin operations, to prevent sticking.

Listen to Edouard Nignon: 'If good grilling and good roasting are in themselves delicate operations, although the eye of the operator is helpful to him, the difficulty is increased when the torrefaction takes place at the bottom of a saucepan. Eyesight then is of no avail. The ear, which seizes the crackling noises of the fat, and the nose, which scents the significant emanations, they alone have now the intuition of the

supreme moment'

In spite of these admirable words, I confess that my frying pan does the trick fairly well. Make one to two tablespoonfuls of olive oil piping hot, and keep a little extra on one side for basting. Drop in your steak. The steak should be turned over with the help of a pair of short tongs, never a fork, after about five or six minutes. It is best to season with salt and pepper towards the end of the cooking. The whole business should take about twelve minutes. Here is a small tip-most unorthodox, but a useful help to mere 'intuition': a hairpin (I keep a special packet for the purpose) stuck into the roast or grill will really do no harm, and be of invaluable assistance for judging whether it is done. The steak should be brown outside and pink inside.

A neighbour, who was for years cook in one of those English country houses where one used to eat so divinely before the war, and who does me the honour to cook for me on occasions, told me this: 'Colonel liked his steak very bleeding. He complained that there was never enough red juice around the meat. It was a problem. Then I thought of getting some liver, squashed it over a lemon squeezer, and poured the liquid over the steak towards the end. The Colonel gave me full marks and was delighted. Of course', she added, 'he never knew!

Your steak has now had ample time to be done. Put a good dab of beurre maître d'hôtel on top, and present it to your friend, accompanied by a good wine, preferably a Beaujolais (best of all: Villé Morgon 1948, but that is a dream) and he will never forget it, and he will go on his way greatly cheered in a truly benevolent and kindly mood-like the French literary critic, who was asked to write a severe article about an author for whom he had a strong dislike: 'No, another time, with so much pleasure, but not today, I had too good a lunch: 'f'ai trop bien déjeuné'.-Third Programme

Tales from the Pacific Islands-II

'Mr. Cadet Grimble'

By SIR ARTHUR GRIMBLE

DO not want to start by misleading anyone about my first official chief in the Central Pacific. Edward Carlyon Eliot was one of the kindest and best Resident Commissioners the Gilbert and Ellice Islanders ever saw. His sympathy for their needs and his energy in championing their causes were inexhaustible. From the angle of native administration, I was more than fortunate in having him as my earliest teacher in the Colonial Service. But it was only in the course of years that I learned this. I could not possibly guess it as I sat sweating before his desk in the Residency at our very first meeting on Ocean Island.

The date was May 8, 1914. Olivia and I had just arrived from England after a two months' voyage, which had also been our honeymoon. We had shot the roaring surf into the boat harbour and climbed the steep hillside to the Residency, to report present for duty. On our way up, we had passed by the busy workshops and crushing-mills of the Pacific Phosphate Company, with their teeming of strenuous workers, white and brown. Half a mile from there, we were in the happy languor of a Micronesian village overleaned by palms, with its flaming poincianas, and chattering children, and smiling bronze men home from fishing who lay about crowned with wreaths of white flowers. Higher still, 300 feet above the sea, we came to the cricket field on the island's crest and stood gasping at its view over the tremendous emptiness of the Pacific. We were thrilled and fulfilled by the exciting contrasts of the place. We longed to let our as yet unknown chief hear how much we already loved our new home. 'But we must be careful not to rave too much about it at our first talk with him', said Olivia as we neared

the Residency, 'or he might think we're gushing'

How right she was! Within three minutes of our arrival, Mr. Eliot had parked Olivia with Mrs. Eliot on the verandah, sat me down before his office desk, and started telling me exactly where, as a cadet, I got off. He had done his damnedest, he said, to keep my species out of the Gilbert and Ellice Islands Protectorate. He didn't want to waste his life teaching pups. He wanted men who had done things, not cubs from Cambridge; above all, not unteachable Colonial Office selections. What the devil, he wondered, was he going to do with me in a place like the Central Pacific? As a matter of fact, he needn't have bothered wondering. Fate, just round the corner of the future, was going to give him no choice in the matter. Three weeks after that first talk, poor, kindly Darbishire, the one and only clerk in charge of correspondence, died of dysentery, and I had to make shift to carry on in his place. Ten days later, Loibl, who constituted in his single person the entire headquarters staff of the Treasury and Customs, went out on sudden sick leave. That left only one other white officer on Ocean Island besides the Old Man and myself-Methven, the O.C. Police and Prisons, who also operated as Superintendent of Works and Port Boarding Officer. The Old Man handed the Customs department to

him and made me a present of the Treasury.

The three of us tagged along like that, amiably enough as far as office work was concerned, for the next eight months. Methven and I became great friends. The Old Man was a hard driver, but he drove himself hardest of all and I grew to admire him a lot. I still believe I could have got him to forget I was a Colonial Office cadet but for what he called my field work. Field work meant, among other things, learning about building methods. District Officers out in the Gilbert and Ellice groups had to design and put up a number of things like bungalows and boat harbours for themselves in those days, and my chief's idea was to get Methven to educate me a little in that direction before I began to run away with Empire-building on a grand scale. It was a very good idea, and I liked it, because I felt I had a real flair for public works. But cadets should not have flairs, so Mr. Eliot said. Common sense was what they needed. My course of study came to an end rather abruptly, in connection with a matter of water supply

Water was a problem on Ocean Island, and Methven was doing his best to cope with it. New storage tanks of concrete were being laid down all over the Government Station as fast as they could be built. One of the first outdoor jobs I had to learn was how to blast twenty-foot pits for them in the rocky earth. The actual work was not difficult. You got someone to drill holes in several rocks; you pushed sticks of gelignite, with detonators and fuses attached, into the holes; then you stamped them in, lit the fuses, and ran for your life. I chose the Residency back yard for my first independent blasting operation. A cistern had been ordered for it. I leapt at this chance of showing the Old Man what a jewel of an all-rounder he had in me. Modest but ready for anything-that was my motto. My only real mistakes were that I chose a Saturday afternoon, warned nobody, put down 100 per cent. too many charges, and used 100 per cent. too much gelignite in each of them. The initial result was an explosion of volcanic force. The surface of the back yard rose bodily into the air, to overhang the Residency in the form of a black cloud. Boulders of gigantic size rained from the cloud and crashed through the roof into the dining-room. The Old Man and his lady were taking their siesta at the time. They addressed me at once, and both at once, from the back verandah, in their underclothes. But they didn't keep it up long, for this was not the end. One of the fuses had burned slower than the rest. A second explosion—trifling, compared with the first, yet still a thunder-blast—roared out. My chief and his partner fled to cover, and so did I, in the opposite direction.

Next morning, after an interview which I need not describe, the Old Man addressed an official minute to Methven. 'Please note', he wrote, 'that I have this day prayed Mr. Cadet Grimble, in the interests of public safety, to abstain from indulgence in public works of any kind. . . As to his training in other outside duties, kindly see that his genius is from now on kept exclusively engaged in the boarding of ships under

your most rigorous personal supervision'.

I had few chances of making mistakes as a boarding officer, as there was little to do but sit in a beautiful thirty-two-foot surf-boat while a peerless crew of Ellice Islanders did all the skilled work. But the job could be exciting, because it took in the landing of mails and small cargo for the Government, and this meant going out in all sorts of weather. In the westerly gales that blew up between September and March, the ships in Ocean Island's unsheltered bay lay bucking like frightened stallions, two miles clear of the raging reef. It was a hard row out in the teeth of wind and sea, and tricky work taking in such things as crates from their slings. The boat passage was a narrow channel blasted through the reef, wide open to the charging seas, a hell's cauldron in dirty weather. When Methven was around, he never allowed me out alone on bad days. But towards the end of 1915, he went over the Gilbert group and I got a real chance of distinguishing myself.

The Bath and the Whisky

Two days before Christmas, a trading steamer bound for the Gilberts came weltering into the bay and signalled at about 4 p.m. that she had on board a new porcelain bath and three cases of whisky for the Residency. Would we take delivery at once, please, as a westerly blow had started and captain wanted to make for Tarawa lagoon that night. The boat passage looked awful to me, and I would not have tackled it only for the sake of a bath—even the Old Man's. But the whisky was another matter. The station was dry of anything but beer, and the cheeriness of our Christmas season depended a lot on those three cases, which were not for Mr. Eliot alone, but all of us. All of us amounted to five married couples by that date, plus a full-fledged District Officer from Tarawa, who was staying at the Residency. I had especially in mind what he—a hero of mine—might think if

I let the stuff go. So out we went. We found the bath awaiting us in the ship's slings. Have you ever tried to catch a bath in a boat from the davits of a ship rolling twentyfive degrees? There it goes at one moment, hurtling up and away from you as the vessel wallows to windward; there it comes now, roaring down at you with the whole ship's side, as she takes her leeward lurch. There is just an occasional second or two between rolls when you can snatch it aboard without scuppering yourself. We waited halfan-hour for our chance in that brutal seaway; but we did get away with it when it came, thanks to the superb boat's crew. I was so braced with the thing. I sang aloud with the steersman as we shot the harbour entrance. 'This is the life', I thought, when I read the note that awaited me on the boat jetty. The Old Man had watched us through his telescope; he had written to thank and congratulate all of us. 'And please', his letter ended, 'have the whisky brought straight up to the Residency, and join us in a drink'. That was the proudest moment of my life—except that the whisky wasn't there. It was in the ship. In the excitement about the bath, I had left without it.

There was only one thing to be done. Dusk was falling when we got out to the ship again. We clawed the three cases aboard somehow, and started off on the homeward pull ... and we pulled, and we pulled, and we pulled, and we gained not a yard shorewards. No boat's crew in creation could have made it against that current. We were in the wrong end of a tide-rip that was scouring the bay. At last, after dark, the captain had to take us all on board for the night. It was only at three o'clock the next afternoon that the weather abated enough for him to get rid of us. The ship was standing away round the point when we landed, 'Well', I thought, 'we've done the trick, anyhow. It's still Christmas Eve, and here we are with the goods'. Yes, that again could have been one of my life's high moments—if the whisky had been there. But it wasn't. The boat captain and I scrabbled through every nook of the boat, but it just wasn't there. Two men of that devoted crew had, in fact, risked a lot the night before to get the liquor safely back on the ship when I had gone aboard. Only, they had forgotten to say so before our return to shore. Not a thing could be done about it now. There was the whisky merrily steaming away to Tarawa.

When I got to the Residency, they were all there, the wives with their husbands, waiting to greet me. Olivia was there, too. They cheered me from the front steps as I crawled up to them. They clapped me on the back. They were waiting to divide the whisky. 'My word, young Grimble', my hero the District Officer said, 'we'll drink the first one for you as soon as it arrives'. Olivia looked so proud, until . . . but forgive me, I can't go on. Please imagine the rest.

Another aspect of my field work was learning the native language. I worked hard at that and could make a crude show of talking Gilbertese in a few months. It was time then, the Old Man thought, for me to start learning about native manners as well. His plan was for me to take lessons first of all from the old headman of the lovely village of Tabiang below the Residency. He left me to work out for myself the way to set about it. So, to begin with, I drew up a list of questions about how a guest was received by the best families and how he ought to behave in reply. Armed with this questionnaire, I went to Tabiang on a day arranged, an hour or so before sunset.

A little golden girl of seven, naked save for a wreath of flowers on her glossy head, ushered me into the headman's house and spread a fine guest-mat for me to sit upon. Seated cross-legged on another mat, she explained with gravity that her grandfather had charged her to entertain me, should I arrive before his return from fishing. He would not be very long now, she said: would I like to drink a coconut while she went on entertaining? When I said yes, please, she brought in a nut which she had opened very neatly with a cutlass-knife almost as long as herself, and offered it to me cupped in both hands, at arms' length, with her head a little bowed. 'You shall be blessed', she murmured as I took it. I did say 'Thank you' in reply, but even that was wrong; I should have returned her blessing word for word, and, after that, I should have returned the nut also, for her to take the first sip of courtesy: and at last, when I had received it back, I should have said, 'Blessings and peace', before beginning to drink the milk. All I did—woe is me!—was to take it, swig it off, and hand it back empty with another careless' 'Thank you'.

She did not run off with it as I expected, but stood instead, with both arms clasping the nut to her little chest, examining me over the top of it. 'Alas!' she said, in a shocked whisper, 'Alas! Is that the manners of a young white chief?' She told me one by one of the sins I have confessed, and I hung my head in shame, but that was not yet the full tale. My final discourtesy had been the crudest of all. In handing back the empty nut, I had omitted to belch aloud. 'How could I know, when you did not belch', she said, 'how could I know that my food was sweet to you? See, this is how you should have done it! ' She sat and, handing the nut back to me with both hands, her earnest eyes fixed on mine, gave vent to a belch so resonant, it seemed to shake her elfin form from stem to stern. 'That', she said, 'is our idea of good manners', and wept for the pity of it. But, luckily, it struck me to beg her to give me another chance when grandfather came in, and the idea appealed to her. On the old man's arrival, she sat him on his mat, smiled at me and danced out to fetch a nut for each of us. I made no mistakes this time. The volume of my final effort surprised and shocked me, but it pleased grandfather enormously, and the little girl clapped her hands for happiness of heart.

Daunting 'Mother Hubbards'

It was part of my duty to submit written reports on these lessons to my formidable chief. I wrote fully about the coconut incident, under the heading 'Honourable Eructation', and for some reason of his own he decided to check up on it. So, one day, we went together by appointment to the headman's house for an official demonstration. A visit from the Resident Commissioner was a big event in the village. A crowd of relatives was there, the women all dressed up in horrible, mission-school Mother Hubbards. I found that rather daunting; also the Old Man's presence threatened to inhibit my output of good manners at the crucial moment. But when I heard the pusillanimous little compromise of a noise, like a genteelly frustrated hiccough, that he made on handing back his nut, I felt that the crumbling prestige of the white race was mine alone to save in that exquisite village by the sea. It turned me into the champion of a cause-yes, and my effort was the effort of a champion. It astounded even our hosts. The little girl shrieked for joy. The rest were convulsed with laughter and fulfilment. People from other houses came crowding round to share the joke. Soon, the whole village was rocking with my excess of good taste. And through it all, I, the undoubted hero of the piece, sat gabbling in vain to convince my livid chief that it was one of nature's relieving accidents, the trick of an ailing stomach, an act of God, anything, anything that might save me from the glare of those cold eves .- Home Service

Are There Too Many City Churches?

By the Ven. O. H. GIBBS-SMITH

FEW days ago the City of London (Guild Churches) Bill received the Royal Assent and became an Act of Parliament. I will try in a moment to give a broad idea of the purposes and provisions of this Bill, but first let me outline the problem of these churches in the City—a problem which this Act of Parliament is designed to alleviate, if not altogether to solve. It is sometimes thought that the problem was created by the bombing of the City and

the damage to so many churches amongst its other fine buildings. But in fact the blitzing of these churches has only served to accentuate a situation which existed long before the war. It is not just a question of rebuilding bombed churches: that would be fairly straightforward if formidable task. The problem is, are these churches redundant? Are they really needed? And if so, for what purpose?

At the moment there are forty-seven churches, of which forty-six are parish churches, in the square mile of the City of London. Their glorious Wren towers and spires dominate the skyline of the City and are the pride of its citizens. But social customs have changed so greatly since these Wren churches were built that almost all the citizens of London are now what the Americans call 'commuters'. With the dislike of actually living in the heart of great cities, and with the ease and speed of modern travel (if strap-hanging is ease) the majority of the people who work in the centre of London prefer to live somewhere on the circumference of the metropolis, if not actually in the country. On the eve of the Great Fire in 1666 there were at least 120,000 people resident in the City, although this figure includes some parishes whose boundaries extended a little beyond the actual City walls. By 1811 this number had declined to 57,700 and the declension has gone on ever since. Today the actual residents number only 5,267. That is part of our ecclesiastical prob-

lem, but it is only a part. Every weekday morning, hundreds of thousands converge on the City by tube, train, bus, and car, so that by nine o'clock or so a vast influx of workers has swarmed into the overnight deserted city to earn their daily bread. The number of these 'commuters' is variously estimated from 310,000 to 472,000; and as the blitzed areas are rebuilt the number will soon overpass 500,000.

In my view it is no proper solution of the problem to abandon and demolish City churches wholesale. For one thing, almost all these churches are architectural masterpieces, and a few are pre-Wren, such as St. Giles, Cripplegate, founded at the end of the eleventh century, and St. Helen's, Bishopsgate, mostly a thirteenth-century building. But the grandest of them all is surely St. Bartholomew-the-Great, founded in 1123 by the monk Rahere. Public opinion has been strongly against losing any more of these national shrines, particularly after the severe losses caused by the war. And, again, it is rightly argued that with nearly 500,000 people pouring into the city every day there ought to be a proper use for them. But these churches—forty-six of them—are by law established parish churches, and no one can pretend that these 500,000 daily visitors are their parishioners. And so the problem is not really tackled unless the Church of England is prepared to

modify its age-long method of providing for people's spiritual needs. For over 1,000 years the cure or care of souls in this country has been bound up with territorial jurisdiction, and except for a few royal and other ancient peculiars every square yard of our land is in some particular parish over which the incumbent, under the bishop, exercises an exclusive cure of souls in relation to all the inhabitants. This system has stood the test of time, and I venture to say that few of

us would want to see it radically altered for the country as a whole. But in the heart of great industrial and commercial areas it suffers from this fact that the majority of the teeming thousands of urban workers are no longer resident parishioners in the places where they work. I am not arguing that City workers need no churches, but that parish churches, as such, are obsolete for their needs. Some of you may remember those lines of T. S. Eliot's from 'The Rock', which appeared in 1934, where not without some cynicism he depicts the plight of what then seemed to be the unwanted churches of London:

I journeyed to London, to the timekept City, Where the River flows, with foreign

flotations.

There I was told: we have too many

churches,
And too few chop-houses. There I was

told:
et the vicars retire. Men do not need

Let the vicars retire. Men do not need the Church

In the place where they work, but where they spend their Sundays.

In the City, we need no bells: Let them waken the suburbs.

Today I would challenge the truth of those lines. I do not presume to speak for any other area than the City of London, although it is obvious that the same problem is present in much the same form in the heart of other big cities. But if you think of the recent growth of Greater London, notably



The lantern of St. Michael's, Paternoster Royal
A. F. Kersting

since the first world war, it is fair to claim that the Church has made strenuous efforts to follow the migratory population into the new districts or outer suburbs where people have been making their homes in vast new housing areas. New churches and church halls, and dual-purpose buildings of this kind, have been and are being built as rapidly as funds permit and building licences can be obtained. But in the City we see the reverse of this process. We see the vast daily influx every morning, and we are bound to ask ourselves whether the Church has not some responsibility towards people in the places where they work as well as in the places where they live. We are bound to recognise that modern travel facilities inevitably produce today great working groups of people, and for that matter great recreational groups, which have no particular relation to the places where they live and enjoy their family life. In passing, it is worth mentioning that the Church as a whole is beginning to provide factory chaplains, and chaplains for modern holiday camps around our coasts. Strictly speaking, these represent departures from the parochial system. It is also fair to add that many City churches have for some years past, in spite of their parochial status, tried to makeand have made very successfully—some unofficial provision for City workers. But the particular interest attaching to the City of London

(Guild Churches) Bill is that it makes for the first time in history statutory provision for meeting the spiritual needs of a floating work-a-

day population.

So we come to the actual provisions of the Bill, of which the most important is the establishment of sixteen 'weekday churches', as they have been called. Their official description is 'guild churches', and although this is a mere name, it was prompted by the reflection that a large number of City workers are the present-day successors of the masters, journeymen and apprentices of the ancient craft guilds. In the Middle Ages, as everyone knows, the craft or trade guilds maintained and controlled industry and commerce in the City of London as in other ancient towns and cities. Today they are historically represented by the City Livery Companies. Another development of the craft guilds was the journeymen's guilds in which some authorities claim the trade union movement has its origin. The guild system throughout its existence was closely associated with the Church, and today many City Livery Companies maintain their ancient links with particular City churches. So the name 'guild churches' seemed fitting to suggest churches for daily workers, and I think it is fair to claim that the name has already 'caught on' in the City: although a name that would have been ecclesiastically correct is 'City peculiars'. The Bill provides for the setting up of these guild churches, amongst them several well known to many people, such as All Hallows, London Wall; St. Dunstan-in-the-West; St. Ethelburga, Bishopsgate; St. Mary Woolnoth; and St. Michael, Paternoster Royal.

But for technical legal reasons these churches have first to be unmade as parish churches before they can be declared guild churches. And so in addition to the Guild Churches Bill we are promoting a reorganisation scheme for the City under the terms of the Reorganisation Areas Measures of 1944 and 1949. This scheme, which we hope will soon receive final approval, will reduce the present number of parishes in the City from forty-six to twenty-four by the process known as union of benefices, which really amounts to the amalgamation of two or three adjoining parishes with the appointment of one church in each case as the new parish church, leaving the remainder as redundant chapels of

ease. When this is accomplished by the scheme, the Guild Churches Bill will convert sixteen of these chapels of ease into guild churches, leaving four which will either not be rebuilt or whose future is undecided, and two which will be diverted to other ecclesiastical uses. The forty-seventh church—the only one that is not now a parish church is St. Benet, Paul's Wharf, and this will continue in its present role of ministering to the Welsh congregation in and about the City.

As the guild churches will have no parishes, the cure of souls which their vicars will exercise will be based upon an electoral roll comparable to the electoral rolls of parish churches. Baptised members of the Church of England over eighteen may without residential qualification place themselves upon the electoral roll of any guild church of their choice without losing the right to be on the electoral roll of their parish church wherever that may be. The people on this roll form not only the congregation but also the electorate, and they will be entitled to elect a guild church council, churchwardens, sidesmen, and other officers. The ministers in charge of these churches will be titular vicars, although they will not be incumbents and they will not possess what is known as the parson's freehold. They will be appointed in the first instance for

a term of five years with the possibility of extensions of three years, but they will be as independent and autonomous as freehold incumbents during the term of their service. They will be under no obligation to hold Sunday services: theirs will be a weekday ministry exercised for the most part during the lunch hour, which in the City is now staggered between twelve and two-thirty p.m. These vicars will be encouraged to experiment with new methods of evangelism and

religious education. They will be free to adopt their own lines which no doubt will vary a good deal. But in addition to lunch-hour addresses, discussion and study groups and question times, some of them may find a place for religious drama and films, and such things as training courses in evangelism. In this way, to quote the Bishop of London, 'The City may become a great laboratory in which new methods of ministry, new spiritual expedients, and new pastoral techniques may be tried out for the benefit of the Church as a whole'.

But as well as ministering to the working population—which may not in every case occupy their whole time—these guild church vicars will be expected for the most part to possess some specialist qualification which will be of service to the Church as a whole. At present the Church of England has very few paid posts for its specialists, so we hope to provide for some of them in the City. We shall want theologians and other scholars, and men who can offer a specialist knowledge of pastoralia, liturgiology, and the ability to fashion new teaching techniques suited to the climate of thought and outlook of today.

But the Bill makes other provisions as well, notably those which are designed to strengthen the links which bind church and state in the City. For the first time in history, there will be one church-St. Lawrence Jewry—which will be officially designated as the Church of the Corporation of the City, although it is true that for some centuries this church has been unofficially regarded in this way. But under this Bill the Corporation will acquire the right of appointment of the vicar, and the freehold of the church and churchyard will be vested in them. An alderman and two common councilmen, being communicant members of the Church of England, will become members of the church council. Further, there is a provision that any ward in the City which so desires may have assigned to it a ward church, which will stand in the same relation to the ward as the corporation church to the City as a whole. Any of the existing churches may be designated as ward churches, whether they are amongst those to remain as parish churches or the new guild churches. It means that the alderman and two common councilmen of the ward in question will be ex officio members of the church council, and the official services for the ward will be held

in the church concerned.

I should like to say in passing how much we owe to the Corporation of the City for their close interest and active co-operation in the drafting of these measures and in everything concerned with the ecclesiastical reorganisation of the City. They have in fact been model partners in this whole enterprise, and they have well earned the gratitude of the Church.

So much for the Bill and its provisions. Whether these guild churches will really be used by City workers when this new scheme comes into operation is, of course, a matter for speculation, but I think it is worth saving that the Mission to London of 1949 did reveal a very strong interest on the part of tens of thousands of Londoners in a modern didactic presentation of the Christian Gospel, and that interest was as marked in the City itself as in any other part of the metropolis. Since the Mission ended we have been trying to maintain the momentum by various schemes of religious education, notably by the School of Religion which was held all over London in Lent of this year. Again, the response evinced in the City, as in other parts, was eager and widespread. Certainly we have enough evidence to prove that there is a place for a concerted daytime ministry-I might almost



All Hallows, London Wall

say a lunch-hour ministry—to City workers, to supplement, but not to supplant the ministrations which they are offered in the parish churches of their places of residence. Personally I do not doubt for a moment that the response of the citizens of London will fully justify the spiritual provisions which will be made for them under this new reorganisation plan for the City.

-Third Programme

New Glass in an Old Chapel

By ERIC NEWTON

HE great east window in the chapel of Eton College now contains one of the most ambitious examples of twentieth-century stained-glass in England. It is the work of Miss Evie Hone who has tackled a difficult problem not only with considerable intelligence but with a certain degree of passion and complete sincerity.

All three ingredients were necessary. The east window is almost the raison d'être of the building. Mid-fifteenth-century English Gothic

prided itself on having invented an interior composed of repetitive vertical piers alternating with large windows sliced by insistent vertical tracery which repeated the rhythms initiated by the piers. Fan-vaulting could add a little interest to the bare conception, but Eton College Chapel dispenses with this luxury. Everything depends on the filling of the windows. Without the colour and the iconography they can provide, the eye is left with nothing beyond a soulful but elementary invitation to rush up and down the fluted verticals. It is a rather tiresome architectural formula, and the Chapel at Eton, for all its purity, uses it less imaginatively than King's College Chapel, Cambridge, for which it is a sort of miniature dress-rehearsal.

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This leaves the stained-glass designer and craftsman (Evie Hone is, of course, both: only by combining the main plan with the technical details can stained-glass succeed) with a heavy burden of responsibility and, for the twentieth - century designer, a slightly embarrassing one. It is as though a modern easel picture had to be fitted into a fifteenth-century frame, and one which dictated not only the size but the main compositional lines of the picture. Under such conditions even the most original of artists would be forced to adopt, to some extent, the mentality of a pasticheur.

It is to Evie Hone's credit that she has realised the existence of the problem and tackled it with a great deal of common-sense, knowing it to be insoluble but also knowing that to ignore it would lead to disaster. The window is divided by

its tracery, horizontally, into an upper and a lower section, and vertically into three equal compartments each of which is again subdivided into three. There are therefore eighteen panels of roughly equal size to be filled—hardly an encouraging layout for an iconographical scheme with a strong narrative content.

Miss Hone has boldly ignored the two major vertical members of the tracery, filled the whole width of the upper section of the window with an impressive Crucifixion, used the five central lights of the lower section for a Last Supper, and introduced into the two lights on either side representations of the sacrificial acts of Melchizedec and Abraham. Thus the whole window has a narrative and symbolic coherence that

cuts across the insistent rectangles of the tracery; yet each of the eighteen panels has a self-contained unity. It is an ingenious piece of planning and it would have been a triumphant success had not the long vertical panels compelled Miss Hone to squeeze some of the figures too stiffly into their containing framework.

The problem is insoluble. Miss Hone's natural feeling for stainedglass tempts her to use the fluent, supple lines and the glowing patchwork of colour that are characteristic of Romanesque and Early Gothic

windows, but the prim rectangularity of Perpendicular tracery has forced her into an unnaturally rigid scheme. She has done wonders, but the contradiction remains. The effect is of a dancer in handcuffs.

Miss Hone's stained-glass is deservedly well known in Ireland. She has nothing to learn about the possibilities of glowing colour, and the Eton College window is as ardent as anything she has done. Cool colours predominate. Acid greens backed by dark and sonorous blues form the basis of the main areas of the design, with pale, coldish flesh tones standing out from them and crimsons, sparingly used, embedded in them.

This is a major work and its success in not only dominating an interior but in giving it a religious meaning tempts me to generalise. There has been much talk recently of a revival of realism in the fine arts, as though realism for realism's sake could provide the contemporary artist with a new stimulus. The slogan is as empty as 'art for art's sake'. No artist can choose to be realistic merely in order to conform to a slogan. Realism, in the sense of exploring the visible world and presenting it or interpreting it in an intensified form, is only worth doing if the artist has a personal set of experiences to communicate, and the kind of realism he adopts will depend on the kind of experience. If the experience, and therefore the communication, has in it a mystical element, realism-the presentation of the visible facts - will always interfere with his intentions. And since oil paint is the ideal medium

The new east window in the chapel of Eton College, the work of Miss

for such a presentation, I suspect that the habitual use of oil paint is one of the contemporary artist's greatest stumbling blocks. Oil paint, exploited in a variety of miraculous ways since the mid-fifteenth century, can no longer be profitably exploited. Its temptations have to be resisted. Only when faced with a stubborn, inflexible medium like stained-glass or mosaic or tapestry is the artist driven to discover the appropriate means of expression for his vie intérieure. Hence the power of Miss Hone's window: and hence the popularity of the recent exhibition of Ravenna mosaics: and hence my delight at the news that Graham Sutherland is to design a huge tapestry for the east wall of the new Coventry Cathedral.

The Listener's Book Chronicle

King George V: His Life and Reign By Harold Nicolson, Constable, 42s.

ON THE WHOLE, posterity has not been kind to the great personalities who dominated the English scene at the time of the first war. The reputation of Lloyd George is shattered by a succession of indifferent books-not excluding his own memoirs: the chilling personality of Bonar Law seems to have acted as a scarecrow to any authoritative writer, and the official biography of Ramsay MacDonald stands still at a single volume, ending in 1919 with all the story vet to tell. Lord Baldwin's life, by the most accomplished historian of our time-Mr. G. M Young-is eagerly awaited. Perhaps alone of King George's Prime Ministers, Mr. Asquith has received a biography in some respects worthy of the position he held. King George has been fortunate in the choice of his biographer and (while the compliment is two-edged) it is nevertheless true that Mr. Nicolson has written a book which far outstrips anything already published about the King's Prime Ministers. As admirers of Mr. Nicolson would expect, his book is not only beautifully written but the ample material before him has been judiciously distilled. Too often the modern biographer—possibly because he or she is too absorbed in all the details of 'the loved one's' life-forgets that what is fascinating to those who quarry is less arresting to those who read. By avoiding this prevailing fault, Mr. Nicolson has saved his book from any shadow of dullness: indeed, this life of King George is one of the few conspicuously important books published since the end of the last war.

The personality of the King was a simple one; he was industrious, absolutely straight-forward and honest, outspoken and, on occasions, peppery but always impelled by an intense devotion to England. All this was known in his lifetime, and the details were skilfully filled in by Mr. John Gore in his personal history of the King which was published in 1941. In that book will be found the anecdote which seems to conjure up the predominant qualities of the King—his love of tried ways, his attention to detail, and his explosiveness. Looking out of the window, he noticed one of his courtiers approaching Buckingham Palace, wearing a bowler-hat instead of the conventional silk-hat; he sent for him and asked 'What do you mean by coming here in that rat-catcher fashion?'

Mr. Nicolson's book gives us the impact of this personality on public life. To some extent the standard histories of the first decades of this century will have to be adjusted in the light of what is here revealed. This is particularly the case over the tortuous negotiations leading up to the passing of the Parliament Act by the Liberal Government, the deposition of Asquith by Lloyd George, the formation of the so-called National Government and the General Strike. In practice, a British sovereign has two important political interventions open to him-one is the decision to grant or withhold a dissolution, and the other is choosing the Prime Minister when the choice is not made obvious by party advantage in the House of Commons. The death of Bonar Law, when Prime Minister, confronted the King with having to choose between Baldwin and Curzon. Although he took the best possible advice, posterity will perhaps hardly endorse the wisdom of his selection. He also had to decide whether to grant the first Labour Government a dissolution in 1924 (and he has been sometimes criticised for this), but this book reveals that he only acted as he did after the respective leaders of the Liberal and Conservative Parties had refused to form a government.

Even on these weighty matters of state the book contains some witty shafts. It is, for instance, curious to learn that during the financial crisis of 1931, when Lloyd George was seriously ill, he suggested that he should come up to see the King by ambulance. When the representatives of the ancient dynastic families of Germany protested to the King against the imbecile proposal to 'Hang the Kaiser', the Foreign Secretary told the King that their letter was 'impertinent'. With prescience King George objected to the appointment of Fisher as First Sea Lord: he wrote to the Prime Minister that he only agreed to it with reluctance and misgivings Siv months later this strange sailor resigned unless he were given 'untrammelled command of all the sea forces whatsoever'. In sending this proposal to the King, the Prime Minister observed that it 'showed signs of mental aberration'

Inevitably, many of the things which a constitutional sovereign is called on to do must run counter to his own preferences. What is expedient has to conquer what is right. The chief example of this in King George's life was the recognition of the Soviet Government after the murder of his favourite cousin (the Tsar) and his family. (Incidentally a letter from the Tsar here published reveals that he always read the Daily Graphic.) As lately as 1929 King George wrote to complain to the Foreign Secretary (Mr. Arthur Henderson) against the indignity of having to receive, and shake hands with, 'the Ambassador of a Government which did not disapprove of the brutal murder of his favourite first cousins'. Coldly came back the reply, which perhaps sums up the inexorable character of a sovereign's work—' it is unavoidable'.

Herman Melville. By Leon Howard. Cambridge. 37s. 6d.

This is an extremely long and detailed biography of Melville by the Professor of English in the University of California. It is obviously the result of painstaking and often difficult research and must be taken to represent the latest state of our knowledge of Melville. In the course of his narrative Professor Howard discusses Melville's books at some length (in a useful though not a very revelatory manner); but this is primarily an account of Melville's life and of the genesis, writing, and publication of the books, and it in no way competes with Mr. Ronald Mason's recent 'critical estimate', The Spirit Above the Dust.

It must be admitted that the book begins boringly. Professor Howard's style is thorough. workmanlike, sensible, but never lively. He gives all the facts he has amassed, though they are frequently not very interesting or importantthe archives of the Melville family, for instance, have produced much information on the 'Herman has a crick in the back' level. But once the start of Melville's writing career is reached Professor Howard's method comes triumphantly into its own. A flood of light is thrown on Melville's literary methods, finances, habits, personal relationships, character; often showing up as quite false the notions of previous critics and biographers. For example, Professor Howard gives precisely Melville's monetary position at the time of his abandonment of fiction, a position which indicates that the famous long fictional silence was lack of a public not lack of cash. And so at last the pattern of Melville's life can be examined piece by piece, and for all who find that pattern extraordinary and still

significant Professor Howard's book will be utterly absorbing. Certainly it will be an indispensable source-book for anyone who wishes to write about Melville—a source-book which will take years to exhaust. It is a pity that so valuable a work omits a bibliography and notes which would show the origins of its material. The preface gives a little information, but is no proper substitute for a scholarly apparatus.

Butler's Moral Philosophy By Austen Duncan Jones. Pelican, 2s, 6d.

This book makes accessible to all the reflections of the greatest of British moral philosophers on many of the fundamental questions of ethics. The established Church of England has attracted to its service many men of practical good sense, cool and reasonable men who could present the facts of morality and religion without undue subtlety and without fanaticism. men who could calm and so control human passions by quiet reflection upon the nature of man and upon the strange predicament in which he finds himself in being alive in this curious world. Such a servant of the Church and of humanity was Joseph Butler. He will be remembered chiefly for the sermons at the Chapel of the Rolls, in which he made his distinctive contribution to psychology and ethics.

Butler is labelled a 'moral philosopher'. He was also a very great psychologist, perhaps as great a psychologist as England has produced. It is upon the analysis of human nature that his ethical system rests. It was Butler who first attempted to work out in some precision the conception of human conduct as determined by a hierarchy of motivating 'principles', and who in so doing anticipated by a century and a half some of the most persuasive psychological systems current today. William McDougall-preeminent among British near-contemporary psychologists in this field-might fairly be described as Butler in modern dress. Sigmund Freud, pre-eminent among near-contemporary European psychologists, can also be recognised as in essentials Butler, albeit Butler in rather fancy dress.

Butler, McDougall, and Freud are in agreement that human motivating dispositions are organised in a three-tiered system. For each the base of the pyramid consists in what Butler described as 'particular affections, passions, and appetites'. The accounts diverge somewhat in their descriptions of the two higher levels of control, but they diverge in fact much less than in the words they favour for the description of the facts. For Butler the two regulating principles at fhe second level are Prudence (or 'Self Love') and 'Benevolence'. and at the apex of the pyramid is the faculty of 'Conscience'. In McDougall the second tier is composed of various 'sentiments', two of which correspond to those described by Butler, and in supreme control is the 'master sentiment of Self-Regard. It is significant that both Butler and McDougall find some difficulty in distinguishing sharply the function of conscience from that of reasonable self-regard-in distinguishing, that is, conscientious from prudential considerations. Freud, of course, thought of many things that had not occurred to Butler, but he too presents an hierarchical system of motives with a 'Super Ego'-a (psycho-analytic) 'conscience' -as an authority with the last word.

In his very scholarly work, Professor Duncan Jones sets out to expound and criticise Butler's ethical doctrines, and through this critical

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THE PRESS ART SCHOOL, LTD. (Dept. TL44) Tedor Hall, Forest Hill, London, S.E.23 exposition to provide a general introduction to ethical theory. He has done something more. He has provided an admirable 'induction' into the 'analytic' approach to philosophy. He has done all this at the highest Third Programme level. The questions posed are inherently diffi-cult, and Professor Duncan Jones makes few concessions to readers who like to skim. Critical discussion follows hard on the heels of exposition, and the presentation of Butler's own views would have been the better for longer quotations. But this condensation will have served a good purpose if it leads the reader to go to the Sermons themselves. The method of treatment is, moreover, well suited to the needs of those who are less interested in Butler as a person than in the questions with which he is concerned. There is much to be said for approaching the problems of philosophy through a study of ethics. Ethics proper is a very small subject Roughly, it is the attempt to answer about three questions: What do we mean by 'good', 'right' and 'obligatory'? What things are good, what things right, what obligatory? How do we know these things to be so? To be able to answer these questions is to know quite a lot about ethics; but to answer them well calls for exciting excursions into logic, metaphysics, and psychology.

The whole of this book should be read, if only as an introduction to its final chapter- Some Ultimate Problems of Ethics'. Here Professor Duncan Jones gives his own views on the first and most fundamental question of ethics. Whether we take the ideas of 'good', 'right' or 'obligation' as our point of departure, we are immediately confronted with the issue between a 'naturalistic' or 'non-naturalistic' view of ethical judgments. The issue is easy to 'feel' but difficult to state in any precise way. Roughly, it is the question whether a statement about what is 'good' or what a man 'ought' to do is analysable into statements about what men actually do or desire, or whether it cannot be so analysed. Professor Duncan Jones is on the side of the angels, i.e., he is a 'non-naturalist' but he gives the naturalists a fair run for their money. He seems to differ from some nonnaturalists in implying that the concept of obligation is sui generis in the sense of being unanalysable. It is, however, possible to hold that statements about obligation are analysable. that they are partially analysable into statements about desires, but not wholly analysable into statements about actual or even possible desires. This would be the case, for instance, if it was held that a statement about an obligation is, on analysis, a statement about what all men would desire under certain conditions, e.g., if they were rational. It is not clear whether such a view (irrespective of its defensibility) would be classified as naturalistic or non-naturalistic.

Those who have a taste for issues of this kind, closely and clearly argued, will find in *Butler's Moral Philosophy* just what they want.

Source Readings in Music History. Selected and Annotated by Oliver Strunk. Faber. 63s.

The study of the history of music becomes more complex as the years bring fresh information about the past while the immensely increased availability of contemporary music makes it the more necessary to keep the perspective clear. Since the children of today have become clamorous in a degree never before envisaged it behoves us to determine their ancestry precisely. Yet the attainment of such precision, in itself a life work, daunts the average student. He sees the miles of shelves where histories and treatises are arranged, decides that the quest for a generally informed purview is beyond the powers of any but an encyclopaedic mind and gives in. He becomes a specialist without having discovered the precise

relationship of his particular part of music to the whole.

What he should have had was a courier who would have put him in touch with the outstanding examples of musicology and thus left him knowing at least where to look for the main features of the crowded scene: such a man in fact as Professor Strunk of Princeton. Widely acquainted with the history of musical thought. learned (as his innumerable annotations show) but carrying his learning lightly and expounding it in a style of English rare among American writers on music, he is the perfect guide for the enquiring student. His book is indeed immensely valuable. To have these eighty-seven extracts from treatises ranging from classical antiquity to the romantic era, available in a single volume, is an incalculable boon. Many of the translations have been newly made by Professor Strunk and here again it is a pleasure to find a musicologist in easy command of his language. It is claimed for the book that it provides the essential material for the study of musical thought. That is no overstatement. As Plato's inspired ponderings over music give way to the dry mathematics of the medieval schoolmen, then wake again into life with the Renaissance, we begin to note how music has been used throughout the ages for a variety of purposes, artistic, social, political. And so the tale goes on, displayed like a finely drawn map in these 900 well-printed pages.

The Feminine Point of View. The Report of a Conference drafted by Olwen W. Campbell. Williams and Norgate. 5s.

Is there a feminine point of view, and if there is what part should it play in the world? For four years a conference of professional women has been debating this question; this is their report. The authors, having determined no doubt that suffragette tactics are no longer popular, have written with modesty and self-control. No one will accuse them of distaff-rattling. Their thesis is that, in the aggregate, women have in greater abundance than men the virtues of gentleness and respect for the individual, and that, if this is so, a greater contribution from them to world affairs might ameliorate the violent character of the age. So far so good.

But now we get into, or perhaps sail too quickly over, deep waters. Some members of the conference thought that these virtues, if more common among women (and some evidence for this is offered in the form of crime statistics), are 'likely to have been caused by social factors and might ultimately disappear if women ceased to be treated as a class apart'. These might be called the Acton group who believe that power corrupts. Others, with Alex Comfort, might lay more emphasis on the possibility that the corrupt (or aggressively minded) tend to seek and obtain power. Neither view offers an optimistic outlook. In the first case, should women gain a greater measure of control, which would come first, their own corruption or the revival of more civilised values? In the second, if the gentleminded avoid power how are they to be persuaded to wield it against not only their own inclination, but also the weight of a virileminded public opinion?

The authors of this report seriously contend that there may be a correlation between the subjection of women and the successive breakdowns of civilisation; they offer this thought to Arnold Toynbee who in his *Study of History*, though he mentions the position of women as a symptom of this or that society, never considers it as a cause of health or decay.

The disease of war-mongering and aggressiveness, so far run on its course and so fatal in its nature, makes it necessary that any suggested remedy, however unpalatable, should be seriously studied. Even if the recommendations of this conference are followed no quick results are expected; 'attitudes of mind—men's attitude to women, and a corresponding attitude of women to themselves are not changed by heroic measures, but gradually and often almost imperceptibly'. On this quiet note the report closes, having ranged in sixty pages over birth-control, income tax, part-time work, Florence Nightingale, and Amelia Earhart. Who knows what seeds it may sow?

The Language of Shakespeare's Plays By B. Ifor Evans, Methuen, 18s.

Several different kinds of book might be written with this title. It might be the kind of linguistic book George Gordon once hoped to write, or a book like Sister Miriam Joseph's Shakes peare's Use of the Arts of Language. But Dr. Evans has little about the resources of Shakespeare's vocabulary, and not very much about his knowledge of rhetoric. There is nothing in his book to attract the language specialist, and comparatively little for the specialist in Elizabethan literature. He gives, apparently for the general reader, a chronological study of Shakespeare's plays considered primarily from the point of view of style, and he provides a commentary on many of the passages in which Shakespeare alludes to language, together with some attempt to characterise the style of each play.

Dr. Evans assumes that imagery should be discussed only in relation to Shakespeare's wider equipment as a poet; and the virtues of his treatment of the subject spring mainly from this assumption. Though sometimes lapsing into platitude, the book is pleasantly written, and not without passages of critical acuteness. But with Dr. Evans' main argument it is possible to disagree. Although he provides a number of qualifications, he seems to believe that Shakespeare gradually outgrew his rhetorical training; that there was a conflict between poetry and drama in his work; and that his most dramatic poetry is usually his simplest.

There is, of course, some truth in this argument which we have parodied by summarising. Lear's reconciliation with Cordelia—

'I am a very foolish, fond, old man'—
is as simple as Wordsworth at his most austere—

'And never lifted up a single stone'; and it is manifestly less ornate in its language 'Love's Labour's Lost' or 'Richard II But Lear's words derive their power from the contrast between them and the gorgeous rhetoric of earlier scenes, and from the fact that their simplicity is an expression of the hero's hardly won humility. It is very doubtful whether the Elizabethans were conscious of any conflict between poetry and drama, and their state was the more gracious. It is only because we live in an age of Cowards that Mr. Eliot was constrained to hope that his audience would not notice that 'The Cocktail Party' was written in verse. Shakespeare made use of all the resources of rhetoric to the end of his career; and though Dr. Evans realises this, he sometimes seems to regret He contrasts

the language of simple, and direct statement where Shakespeare is so effective, though his achievement here has never been sufficiently praised, and the language of true or false persuasion where the formal embellishments of language are exploited.

All through the book, Dr. Evans returns to this contrast. On some rather flat lines from 'King John' he remarks:

It is one of the major problems of Shakespeare's language why once he had captured this supreme simplicity in blank verse he did not use it more frequently.

Later on he complains that Shakespeare never fully exploited the 'moving realism' he discovered in the later Falstaff scenes. Dr. Evans is far too intelligent not to recognise that much

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The Swiss Franc is a 'hard' currency. Its exchange value in 'soft' money countries is very high. A Pound, for instance, only buys Swiss Francs 12.23, but 980 Francs in France and 1,740 Lire in Italy. Does this mean that holidays in Switzerland are dearer than elsewhere? Not at all. To begin with, a hard currency tends to keep prices stable. Furthermore, that they are in Switzerland not only stable but in every way competitive, is very clearly shown in a recent investigation made by the Swiss National Tourist Office.

Prices for transportation, accommodation and meals, as well as expenses incidental to travel, were examined on a uniform basis in 10 European countries. On the data obtained from altogether 10 countries (Switzerland and 9 others), 10 price categories were established, the first being the cheapest, the 10th the dearest. It was established that with regard to the cost of transportation—190 miles by rail—Switzerland belongs to the 6th category for 2nd class and the 5th for 3rd class travel. The price of 63 cts per litre of petrol (Frs. 2.86 per gallon) places Switzerland in a category considerably cheaper than that of four other European countries. At a medium class hotel in a large Swiss holiday resort, price for dinner, bed and breakfast, including tips, is in the 4th category. In the case of an inclusive holiday arrangement for a minimum of 3 days, Switzerland is in the 5th category. Three-quarters of all hotels and inns in Switzerland belong to the middle and lower price categories. As to incidental expenses, 15 items were investigated and an average established for each country. As a result Switzerland was found to be in the very favourable 4th price category.

Adding to these reasonable prices the beauty and diversity of the scenery, the excellent service provided by the hotels, as well as the tourist organisations generally—features which are difficult to express in figures—the holiday maker will find that Switzerland satisfies all tastes and purses.

of Shakespeare's greatest poetry is neither simple nor realistic, but he seems uneasy when faced with the complex style of the great tragedies.

Good dramatic dialogue has to be closer than most poetry to the language of ordinary speech; but after reading Dr. Evans' book we are left wondering how far in his prose Shakespeare transcended the colloquial, and what was the precise nature of his compromise between patterned speech and the demands of characterisation. Perhaps the general reader would be helped through what he regards as the duller passages of Shakespeare's plays if he could be brought to realise that all poetry is artificial. When he begins to ask 'Why this particular kind of artificiality at this moment in the play?' he will not need an over-officious producer to save him from boredom.

New Novels

The Green Man. By Storm Jameson. Macmillan. 15s. The Closed Harbour. By James Hanley. Macdonald. 12s. 6d. Fires in the Distance. By James Courage. Constable 13s. 6d.

OW infuriatingly high they tower, those nineteenth-century Olympians of the novel! It is enough to make any ambitious twentieth-century novelist shake his fists and cry, 'It isn't fair. It isn't fair'. For all their genius, those masters were cultivating virgin soil and the climate in which they dwelt was far more constant, and there were not more than two or three literary markets, which though small by modern standards were carefully distinguished in their likes and dislikes. A writer had a pretty good sense of what would please and what would shock until Bernard Shaw battered prejudice into apathy. But today it is very difficult for a novelist to know how much he can take for granted in his public, what degree of knowledge, what subtlety in the use of words, what assistance from the imagination of readers whose minds are daily becoming less capable of absorbing undigested material. At the same time, the speed of change is so much more rapid that each generation is sharply distinguished in its sense of values, almost as sharply divided as the nations of Europe are by their different cultural traditions.

Of the three novelists under review, Miss Storm Tameson must have been most deeply torn by these considerations. Her books, we learn from the jacket, have been translated into German, Czech, French, Swedish, Danish, Norwegian, Spanish and Polish. She is, that is to say, a European author, whose original English version must therefore be viewed as a master script capable of being rendered without too great a loss into other languages. Anybody who has written with an eye to translation knows how frequently a phrase which is reverberatingly evocative in English is a dead loss to a translator and in its place appears either an absurdity as gross as Constance Garmett's mistranslations from the Russian or a cliché devoid of all distinction. Far better to write a serviceable European English that can be translated without undue distortion than create a masterpiece that cannot be exported. It must not be thought that Miss Jameson is concerned merely with European sales. She is the most Europeanminded of English novelists—as witness her magnificent Presidency of the London P.E.N. Centre during the war when London became the

asylum of European letters.

The Green Man, over 750 pages in length, is a contribution to the social history of Europe during the fateful years, 1930-1947. It is of a similar composition to her trilogy. The Other Side, Before the Crossing, and The Black Laurel. Characters recur, such as that distinguished and intolerable literary critic Cecil Cowley. But there is one important structural difference. By conceiving her story as one immensely long novel instead of three of average length, she has got a smoother flow from section to section. Being a true European, instead of a literary shopper for the good life in the cheapest markets, Miss Jameson roots her Europeanism in a single place, an old country mansion in her native Yorkshire. The common quality of Europe, she realises, is devotion to a place with its history and its tradi-

tion of continuity. The obverse is cosmopolitanism, of which, despite their strident advocacy of a Way of Life, the citizens of the United States are the natural exponents. She chooses twin brothers: the elder Richard, typically English in his combination of reverence for tradition, instinct for anarchy, feeling for place and ruthlessness about bunkum, official or unofficial; the younger, sensual, power-loving, generous to all those he can dominate, kind to all who can be useful. The elder wishes at all costs to keep Daubney's as a house in which a family shall live, the younger wishes to convert it into a chemical research station. In the fortune of the house is involved the history of their families and the nations of Europe.

Miss Jameson's manifold characters are interesting, valid and convincing in their periodic appearances over the years. The narrative holds, not merely as a story but as a clearsighted history of the decline of our civilisation. And yet behind Miss Jameson and The Green Man towers the figure of Tolstoy bearing War and Peace. Why is it that War and Peace, even in translation, is so immeasurably superior? It is not merely that Tolstoy was writing in an age and about people who despite the upheaval of the Napoleonic invasion remained relatively secure, though the dignity of human living is admittedly curtailed by the brutalising power of mass annihilation. It is also that Miss Jameson gives us no sense of even her most successful creations living when they don't appear on the stage. Even if we were curious, we would find it hard to visualise what they did in their spare time. They lack the dimension of mystery. To make the most of their brief scenes, they speak without reticence betraying their motives uncommonly rudely. This unsubtle presentation of subtle situations, more proper to the theatre than the novel, will give Miss Jameson's magnum opus at the same time a wider currency and a shorter life than it might otherwise have had.

Mr. James Hanley's harbour is Marseilles, some time apparently after the late war, and it is closed to Captain Marius of the French Marine. Marius during the war, in a fit of rage at an act of insubordination which ran his ship to founder in a minefield and so involve him for the second time in the loss of his vessel, struck his nephew a single blow which killed him. With the one purpose of finding another command, he comes to Marseilles followed by his mother and sister, who have sold up their house in Nantes, bent on revenging the murdered youth. Marius is a soul in torment, rejected by shipping companies, accepted only by a prostitute who refuses to marry him because she prefers her profession to that of housewife. He is pursued by a dwarf, whom he regards as an agent of the Sureté, but who in fact is a saint concerned only with saving his soul.

Despite the praise that he has received from some critics as a realist, Mr. Hanley has never—any more than Dostoievsky—used realism except to authenticate situations with whose moral and spiritual significance he is primarily concerned. His imagination operates in an atmosphere of

nightmare and a factual frame is useful if necessarv to contain it. The Closed Harbour is the most mature work I have read by Mr. Hanley. His pretence at realism is minimal. With the franc at one thousand to the pound, he makes an employer give his clerk a rise of a hundred francs a month and the clerk glow with gratitude. Forty francs are demanded for a long taxi journey and thirty are paid. This Marseilles exists only in imagination, but it is an imagination raised to a high temperature. The punctuation is if anything wilder than ever; but the phrases struck off are more vivid, and the occasional remark betrays a wisdom and thought astonishingly profound. But then behind Mr. Hanley stands up the colossal figure of Dostoievsky bearing in his hand that comparatively minor work of his, Crime and Punishment; and oh! how much funnier, wiser, more out of this world and more in it, Crime and Punishment appears! Even Mrs. Garnett's odd translation reads as better English.

Mr. James Courage is a New Zealander, the author of two novels, which I haven't read, besides his Fires in the Distance. The story of Fires in the Distance is precipitated by the impact of a good-looking and sensitive young New Zealander, on the eve of leaving for England to study medicine, on the Donovan family living in a remote wool-station. Mr. Donovan loathes his guts, but Mrs. Donovan, the ex-musician, and her children, Katherine, the daughter who has turned shepherd, Leo, the son turned cook, and Mog, the child liable to turn anything, all pounce on this unfortunate man to satisfy their desires. It is a tragi-comedy of love unfulfilled by sheep-farming, with moments of great delicacy and high humour. That this is some wool-station somewhere in New Zealand one is convinced from start to finish. But behind Mr. Courage start up two of the giants. One moment one is in the steppes of the master, Turgeniev, where first love could not bloom so well if it were not sure it would not seed. The next, Chekhov, reminds us of two plays he wrote, 'The Cherry Orchard' and The Three Sisters

Also recommended: Selections from Thomas Wolfe (Heinemann, 12s. 6d.). This volume just over seven hundred pages in length is considerably shorter than any of the novels which that geyser of a giant Thomas Wolfe spouted out for the editing of the late Maxwell Perkins. Immensely tall, Wolfe felt as much a misfit as a dwarf. But he wrote Brobdignagian. This book belongs in the series, produced in the United States as 'The Portable . . .' but more delicately handled, though less accurately, by Jonathan Cape, as 'The Essential . . .' The red light went up on what is called in U.S. without a glimmer of a smile 'The Portable Poe'. The Portable Thomas Wolfe reveals this giant less mangled on his twin Procrustean beds than a writer with less genius and more sense of style. Maxwell Geismar has selected, arranged and introduced this volume, which is an entirely American product unhaunted by the ghosts of any of the Victorian masters.

ARTHUR CALDER-MARSHALL

CRITIC ON THE HEARTH

Weekly comments on B.B.C. programmes by independent contributors

TELEVISION

The New Juggernaut

Ne "comers to television in the West of En land and South Wa'es have so far had to be content mainly with the element of novelty in viewing distant happenings rather than with any high quality of programme interest. For many of them it might have been an enthralling experience to watch the London bulkers doing their turns for the instruction of a visiting foreign film actor. Some would perhaps have found in the floodlit cricket at Highbury visual relish not obvious to the rest of us

I think I speak for no oppressed minority of viewers in saying that these programmes, and others of the last fortnight, were not worth their generous allocation of time; that they gave us few genuine viewing satisfactions. Speaking only for myself, they confirmed a fear that the cultural possibilities of television are in danger of being sacrificed to mediocrity. The nation is now almost wholly within television range.

I took a serious pleasure in seeing the latest in the admirable 'Struggle Against Adversity' series, conducted by Jeanne Heal, for its intrinsic interest but also for its assertion of higher values. It dealt with the relatively little-discussed question of the foster child, and it was an objectlesson in something more than a problem of the modern community. Engaging the sentiments of public consideration and private sympathy, it demonstrated the uses of television as a proving ground for ideas contributing to the general good. There can have been few viewing families in which the sincerity of this programme was not appreciated as a relief from the sophisticated flippancies of some others that do not fall within our scope here.

'A Parliament for Scotland?' was not first-rate television: sound radio could equally effectively have brought us its sincerities and asperities. It was burdened by too many speakers for the time given to it, and it suffered also from some untidi-



Dr. Margaret Mead with Rooney Pelletier in 'Speaking Personally' on August 6

position but not, as it chanced, for the warm, good-natured presence which television disclosed to us. This was an interview, suavely and efficiently conducted by Rooney Pelletier, who had bethought himself of average-man questions about anthropology that did not insult Margaret Mead or us, the viewers. A later contribution to the same series, that of Lady Megan Lloyd-George (pre-recorded on film) seemed to have been planned and phrased with future electioneering in mind. For the larger viewing comity east of the Severn this was one of the disappointments. 'Speaking Personally' should come to rest for a time, or employ more editorial *finesse* in its choice of speakers and themes. Not that procuring good television subjects under either head is a simple matter. Many disappointments of another kind are undoubtedly on file in the Talks Department.

The official opening of the B.B.C. regional television transmitters has in every instance been an impeccably dull business. Last Friday's in-



The floodlit cricket match between Middlesex and Arsenal, televised on August 11

This is a stage at which a generation wiser than ours would pause to consider afresh the implications of a development which it seems must inevitably lead to lowered standards of output in order that its momentum may continue. What an enlightened posterity would insist on is a scaling down not of programme quality but of viewing time, and that radically. Television ought not to be too much with us, to echo a cry of Wordsworth's in a wider philosophical context. Its genius should be dedicated to the best, an ideal probably rendered impracticable by heavy capital expenditures in terms of a succession of transmitting stations and an increasingly complex central organisation. The new juggernaut strides across the land, its growing appetite for varying mental skills ministered to by persons all too often not remarkable for them; a hard saying that needs to be said. Back from holiday, eyes rested, critical zest renewed, I declare a conviction that television, as we know it, is largely a time-wasting social force.

Looking over my notes of programmes recently viewed I find no more than three or four items that I should have preferred not to miss. ness of management from the chair. The arguments carried no great weight of logic on either side, but there was some lively debating cut-and-thrust and the camera succeeded in catching the facial expressions of the more volatile contestants with a deftness which supplied the chief pictorial interest of the occasion.

I am glad, too, that I did not miss Margaret Mead in the 'Speaking Personally' series, which has been curiously uneven and more than once disappointing. As the author of Coming of Age in Samoa, she had prepared me for her clarity and ease of ex-



Members of the Brynmawr Art and Music Club who performed traditional Welsh dances before the opening ceremony of the Wenvoe television transmitter on August 15

auguration at Wenvoe was exceptional only in that it provided us with the spectacle of a Postmaster-General defying drenching thunder-rain with good-humoured pertinacity. Otherwise, the mixture was as before: country dancing, choral heartiness, and guarded speechmaking, all very decent but resolving itself into nothing much to look at

On the official plane, sponsored television advertising remains a relegated topic. Meanwhile, unsponsored television advertising, or something very close to it, is with us most weeks in the women's hour programmes; and how much longer, one asks, is it to be allowed? There must be a steadily growing number of advertising agents who hurry back from lunch on Tuesdays and Thursdays to tune in to their office sets. There is justification for giving out the names of the publishers of books men-. tioned, though none, I suggest, for an author announcing the name of the publisher of a book not yet written, as happened recently.

REGINALD POUND

BROADCAST DRAMA

Saying the Word

'WOULD YOU THINK well to be walkin' round all your life, the like o' that? ' Possibly not all my life: I would need a change, plain bread after sweets. But it is a joy now and again to meet the rhythmic folk-weave of Synge, to hear the Irish tongue as it shines in those cadences that no dramatist has matched, though so many have tried to imitate them. Synge, who never 'shut his lips on poetry', has all the marks of a radio master. In 'The Well of the Saints' (Home) I master. In found myself echoing more than once Mary Doul's 'I did well surely not to marry a seein' man!' It was good enough to be a hearin' man. to see those Irish solitudes only in the mind, and to concentrate on the rise-and-fall of that magical speech.

It can become less magical if it is spoken imperfectly. Then the light can fade from the west. But Sunday's revival, a recording, had the true rhythmic line. There was no monotonous chanting, though Harry Hutchinson, otherwise in good voice, took breath too audibly. It was a mournful pleasure to hear the tones of Maire O'Neill; and William Devlin could sketch powerfully the halo of the wandering Friar. Even if the play, bitter-sweet, is not the heart of Synge, after hearing it we can have little patience with synthetic Irishry. 'He had word and phrase dance to a very strange rhythm', said Yeats; with Synge's death that rhythm was lost.

Now from Ireland to France, from saints to 'The Blasphemer', to the French play by Thierry Maulnier (Third) that Christopher Sykes translated and adapted for broadcasting. This, when all is said, is stern and well-fashioned melodrama in thirteenth-century Mantua; and on the night I heard it Nature did her best with the sound effects. Alan Wheatley, as the dominating Count, and Rachel Gurney as the woman he loved, drove the play forward on a course firmly plotted by Val Gielgud, while outside thunder cannonaded and lightning spat over Hampstead, and, within, voices emerged from the radio set in a torment of crackling. We have to describe such a performance as this as electrical. I was certainly aware that Alan Wheatley was at once subtle and forcible: he can 'speak

Mary Merrall can be a forcible actress when there is something for her to do; but she had not much chance in 'The Watcher in the Wings' (Home), a rather doughy domestic play by Susan Ertz that kept me waiting in vain for some 'lift', some glint, something out-of-the-rut. Maybe this is peevish: at least the play kept me listening while the company strained to impress its audience with the merit of a contrived situation. I cannot believe with any vigour in charming old men who say that 'In the lives of married people there should be no Watcher in the Wings'. No doubt that is the kind of word that should be spoken in an Irish accent. There were no Irish accents on Saturday. We had instead some vigorous acting from Miss Merrall; from Jill Raymond as one of those unlikely young girls with whom everyone (except a jealous godmother) falls in love within ten seconds; from Ronald Simpson, and from Martin Lewis as the old man, the watcher in the wings. I still wish it had been in Irish.

Poised appropriately in a plump armchair, I eagerly through 'The Leisure Hour (Light), hoping to be entertained: as it turned out, it seemed an odd way to spend sixty minutes of leisure. But doubtless I was unlucky. It cannot be often that a programme with Jeanne de Casalis, Wilfred Pickles, and Robb Wilton's Mr. Muddlecombe in it proves to be so tedious. This was an occasion when some excellent artists without the words to say could not for once disguise the fact. Again, perhaps, an Irish accent? . . . There was one Irishman (Tony Quinn) in an odd little piece, 'Seven Midnights From Erin' (Home). Wind, waves, a supernatural death-warning: 'Now what makes a man fear death from all quarters until midnight tonight and feel perfectly safe after it? But the excitement fizzled: no sting in the tail. The drama should have been re-writtenpreferably by Synge, with the words to say.

I. C. TREWIN

THE SPOKEN WORD

Far Afield

As I RUN through my newly arrived Radio Times, I often mark those fifteen-minute talks which come on the Home Service at 9.30 every morning except on Saturdays and Sundays, each Monday's talk being a repeat of Alistair Cooke's 'Letter from America' which is always worth listening to. But it is one thing to mark a broadcast and another to listen to it. For me 9.30 a.m. is a peculiarly awkward time. Breakfast is long since over and I have settled down to work, and when that has happened I seldom remember before ten o'clock or so to remind myself that it is half-past nine. Last week I marked all these talks and succeeded in hearing only two. The laws of chance forbid me to believe that in two cases out of five I struck particularly lucky, but the fact remains that both these talks were first-rate. Adrian Seligman's theme was 'Islands and Islanders', and in fifteen minutes he displayed in vivid detail and colour a lagoon-island somewhere east of Fiji and the Friendly Islands-a mere ribbon of coral, covered with coconut palms and hardy shrubs, surrounding a lagoon eighty miles in circumference, a Finnish island of flat granite rock and pine trees in the black waters of the Baltic, and a mountainous Aegean island in a blue sea whose village is a brilliant mosaic of pastel-coloured houses. It was not only the islands that he described, but their inhabitants. It is his experience that islanders, even those living in the remote Pacific, far from what we call civilisation, are exceptionally civilised people, generous in their hospitality to strangers and endowed with a great dignity and delicacy of feeling. He gave a heart-warming account of his reception in each of the islands.

We take you now (as announcers love to say) to Southern Rhodesia. In 'Memories of the Vlei' Doris Lessing recalled the scenery of her early home. A vlei is an area of low-lying land and, when the rains broke, this particular vlei would be flooded and wonderful pink and white water-lilies would blossom on the water. This talk, spoken in a gentle, leisurely voice, was not only vividly descriptive: it had about it a unique and memorable atmosphere. I know Doris Lessing's novel The Grass is Singing by name only. but it is clear from this talk that she is a skilled writer

Pacifically speaking, Sir Arthur Grimble's Gilbert and Ellice Islands Protectorate is within hailing distance (say, a thousand miles or two) of Mr. Seligman's island. In the second of his 'Tales from the Pacific Islands', called 'Mr. Cadet Grimble', Sir Arthur described the arrival of himself and his young wife at Ocean Island. the administrative capital of the Protectorate. and his early experiences while learning his job. He is a delightful broadcaster, quiet and comfortable on the ear. He produces his effects not by a lavish use of vocal expression but by means of a very nice taste in words. Without raising his voice he can on occasion be outrageously comical. His account last week of the ceremonial eructation expected of those who accepted the hospitality of the native chief was extremely funny. I hope we shall have some more of these 'Tales'.

'The Old Chief's Prayer' took us to Kenya, but Peter Abrahams' talk did not set out to describe the country in detail, although we were aware, throughout it, of the presence of the great mountain. His theme was his meeting and talk with the old Chief Koinange of the Kikuyu and the old man's prayer, spoken aloud at sunset in view of the mountain, that God would give them back the land that was theirs before the white man came. It was an impressive talk in which the nobility and sadness of the old

chief were touchingly presented. MARTIN ARMSTRONG

BROADCAST MUSIC

Jupiter and Some Nightingales

SATURDAY'S CONCERT at Glyndebourne was a model of programme building-the two great String Quintets in G minor and C major by Mozart with a group of songs by Debussy and Mozart's Oboe Quartet between them. Léon Goossens played with all his astonishing virtuosity and command of phrasing and accent-the tune of the finale bounced along as lightly as a ping-pong ball-and he was well partnered by the strings. The Quintets too were well played, but 'well' here is not enough. The great upstriding theme which opens the C major and makes one think of it as the 'Jupiter' among Mozart's chamber-works, needs to move more spaciously. For one thing the players treated Mozart's forte on the dotted minim as stp. If the criticism of these accomplished players seems pernickety, let them listen to the Pro Arte recording. Mme. Danco's singing of Debussy was completely enchanting, the enchantment being cast by intelligent singing. Long will one remember the sudden sweetness of the fluting nightingale in the last line of 'En Sourdine'

Another nightingale—not Verlaine's 'voice of despair', but Hans Andersen's life-saver-was heard the night before in the person of Mattiwilda Dobbs, a remarkably accomplished coloratura singer capable of vying with any flautist. Unhappily the broadcast of Stravinsky's opera was sadly marred by the ill-temper of Jupiter Tonans, who seemed unable to get over his unsuccessful adventure on the previous night. This was disappointing, for the music did not falsify rosy memories of the first performance at Drury Lane. Perhaps, in the circumstances, we may be allowed a repeat-broadcast later on.

From the budding Stravinsky to the ageing Strauss is a passage of thirty years. Yet I suppose that in some respects 'The Nightingale' may be regarded as a more modern or advanced work than 'Der Liebe der Danae'. Strauss uses no idiom which he might not have used in 1900. Indeed his harmonic language, like his orchestral texture, had become much simpler than in the days of 'Ein Heldenleben' and 'Elektra'. There was, in one sense, nothing in the new opera that we had not heard before. All the old ingredients are worked over again in this characteristic mélange of romantic philosophising and nearbuffoonery. There was a touch of the Shavian in Strauss, which led him to jest at the stars.

But if the ingredients are familiar, this is no mere réchauffé of left-over materials. Gay myth,

indeed! And what an achievement for a man of eighty, who twenty years before had been written off as an extinct volcano! He might not be able to do something as new within his own oeuvere as Verdi's 'Falstaff' or as different from what one expects as each new work by Vaughan Williams—to name the only modern composers of consequence who have kept it up to that age—but he could still turn out a long opera that almost continuously holds the listeners' interest with its outpouring of vocal cantilena, its orchestral felicities and unfailing sense of drama. He

had the Midas-touch and could turn even his silver rose into a new shower of gold. The horrid little 'almost' in the last sentence but one is a reservation due to the final scene, which, at a first hearing without the stage-scene, seemed too long by ten minutes. The performance under Clemens Krauss was obviously inspired by admiration and affection for the composer, and the singers, especially Midas, Jupiter, and, after a nervous beginning, Danae, made the most of their grand opportunities.

DYNELEY HUSSEY

The Early Mahler By ROBERT SIMPSON

Mahler's Second Symphony will be broadcast at 9.0 p.m. on Monday, August 25, and his First at 9.0 p.m. the following day (both Third)

THE conflict in Gustav Mahler's mind remained basically the same throughout his stormy life; if it changed, it did so only in degree, in intensity and scope. He was a man of brilliant intellect, capable of being logical to the point of hair-splitting, deeply desirous of achieving an objective view of the world. At the same time he had a difficult and often uncontrollable temperament; this would cut sharply across his reasoning with blinding flashes of disastrously subjective feeling, obscuring the issues he so earnestly wanted to understand. His works reflect this inconsistency. Mahler has been variously described as 'a great original', 'lacking genuine individuality the last of the great romantics', 'the first real modern composer', 'a great decadent', 'a progressive mind', and many other contradictory things. There is a grain of truth in all of them, though there is much more value and meaning in the positive statements than in the negative ones; more people are impressed by Mahler's originality than are put off by his deliberate use of banality (which is, after all, part of his originality), and his influence on modern composers is likely to exceed immensely what he himself derived from his predecessors. What is decadent in his work is a reflection of what he deplored, and he rarely fails to express his most strenuous and hopeful opposition to it.

As Mahler grew older and more experienced, the conflict became deeper and more intense; yet his art developed, and perhaps the highest praise one can give him is to point out that his progressive mastery of his work outstripped the growing force of his mental stresses. He never became a truly objective composer, as did Beethoven, Debussy, or Carl Nielsen, but his heroic efforts to approach what he understood to be a supremely desirable state make him one of the most profoundly touching and impressive figures of his time.

Struggling towards complete mastery, Mahler

sometimes tripped and fell, but each fall was in a forward direction, so that the whole body of his life's work shows a continuous growth in subtlety of organisation and power of expression. The bigger his mistakes, the more he learned from them. The First Symphony is, it seems fair to say, better organised as a whole than either the Second or the Third, but these latter advance in the direction of expressive range, not of technique; the trehnique that was equal to the demands of No. 1 frequently fails under the strains of No. 2 and No. 3. It is not only that the large dimensions tend to put too severe a stretch on Mahler's architectural capacity; the excessive intensity and, ocrasionally, the pre-

tensions of the expression, sometimes cause him

to overload the texture of the music. Already in

the finale of the First Symphony this problem

shows its head; that movement is at once the most adventurous and structurally the weakest in the work.

All this is internal evidence of Mahler's basic conflict, expressed in the very structure of the works themselves. The gentler Fourth Symphony evades the greater issues, and is in the nature of a valuable (and richly poetic) discipline. But compare its range with that of the more aggressive No. 1 and it will at once be seen how far forward Mahler has come, for all his uncertainties. From the Fifth onwards the technique gradually approaches the expressive intent, reaching its finest achievement in the first movement of the Ninth Symphony. In this context, 'technique' is not merely virtuosity in the handling of instruments or the manipulation of counterpoint; it is a far wider term, embracing all the means that create the total effect of the work. Mahler was at all times a master of what is conventionally known as technique', for there was nothing he did not know about the orchestra, about harmony, about counterpoint; but for him each work meant a new beginning. When he re-scored No. 5 in 1911, he wrote: 'I cannot understand how at that time (1902) I could have written so much like a beginner. Obviously the routine I had acquired in the first four symphonies deserted me altogether, as if a totally new message demanded a new technique'. Nothing could be less true than to suppose that Mahler had too much facility. He had to fight every inch of the way, and always upwards.

The chief influences in Mahler's earlier works are, of course, Austrian, Schubert and Bruckner, with the German, Wagner, towering behind. Another deep influence that is less often commented upon is that of the Frenchman Berlioz, whose freedom and fiery artistic courage fascinated Mahler. The very beginning of the Second Symphony, for instance, is clearly inspired by a striking passage in that startling overture, 'Les Francs Juges', and there are numerous examples of scoring in the Ländler that must have been derived from the ball scene in the Fantastic Symphony; in the last movement is a passage (Fig. 22, Mit etwas drängendem Charakter) in which the restless intensity of the melody recalls irresistibly the second theme of Berlioz's 'Benvenuto Cellini' overture. The fingerprints of Schubert and Bruckner are more obvious, and, because more pervasive, less easy to pinpoint. One clear touch of Wagner in the Second Symphony is the subject in the finale that is later associated with the words 'O glaube, mein Herz: es geht dir nichts verloren! melody is strongly reminiscent of Parsifal's cry (in Act II), 'Erlöse, rette mich aus schuld-befleckten Händen!' One could go on searching for and finding many instances such as these, but none of them affects the complete independence of Mahler's mind. A later symphony (No. 5) has towards the end of its turbulent second movement a powerful D major climax that, taken out of its context, might well sound like pure Wagner; but in its place it makes an overwhelmingly Mahleresque impression.

The principle of progressive tonality, which (as a basis for the construction of whole symphonies) Mahler and Carl Nielsen discovered independently, does not appear in Mahler until the Fourth (1900). In this matter the Dane was well in advance of his contemporary, having fully developed the idea in his First Symphony in 1892. It is true that Mahler's Second (1895) begins in C minor and ends in E flat, but the ending in the relative major is not organically evolved, as is Nielsen's ending of his 'G minor Symphony in C major, Mahler's First (1888) is a straightforward work in D major; its highly original finale begins in F minor, with a second group in (of all keys!) D flat, but it eventually finds its way back to D major with shouts of triumph that have since been echoed somewhat hoarsely by Shostakovich in his Fifth Symphony. The opening of Mahler's First is even now one of the finest and most imaginative passages in all his music, a completely, magically static introduction, from which there is a gradual awakening to a springlike freshness and gaiety; behind this liveliness lies an ever-present mystery that is likely to charge the atmosphere at any moment, rendering it still and tense again. The second movement is a Schubertian-Brucknerian scherzo, with a gentle trio, and the third is a delicately and wryly poetic suggestion of Callot's picture in which the animals show mock-grief at a hunter's funeral.

The vast Second Symphony is in five movements; Mahler tries to solve his mental conflict by turning to the mystical idea of resurrection. The first movement is a gigantic funeral march, fraught with thunder and lightning, and the second is a charming Ländler, perhaps too sophisticated to make the intended effect of open-air peacefulness. The centre of the whole work is the wonderful scherzo, an inexhaustible masterpiece in itself, never at a loss, and of tremendous cumulative power; this is followed by the alto song, 'Urlicht', in which the human voice asks for a light to show the way ahead. Mahler's answer is the huge panorama of the finale, immense and sprawling, structurally chaotic, often bombastic, yet always original; elaborate arrangements are made for the Last Judgment and a massive chorus heralds the Resurrection. Here is real immaturity and subjectivity; sane Englishmen may smile. But what fabulous vitality and courage had this venture-

some genius!

Broadcast Suggestions for the Housewife

WILD FRUIT IELLIES

HAVE YOU EVER THOUGHT of making jelly from the wild fruits that are so plentiful this year? Blackberries, for instance, or elderberries, bilberries, or rose hips. If you mix any of these with crab apples you will get a delicious flavour and colour. You can try using equal quantities of crab apples and one of the other fruits. For example, 3 lb. of elderberries and 3 lb. of sliced crab apples. The fruits should first be stewed separately. And there should be just enough water to cover them. When the fruits are tender. strain them by turning into a jelly-bag.

A jelly-bag can easily be made from a piece of old blanket, machined firmly in the shape of a cone, with three strong loops securely attached. Before using the bag, scald it through with boiling water, as it makes it easier for the fruit juice to drip through. Turn a chair upside down on a table and fix the bag to the legs, with a basin underneath to catch the juice, or use a three-legged table upside down. The fruit should be brought slowly to the boil before turning into the bag. Do not squeeze it on any account, or the jelly will be cloudy.

Now for measuring the quantities of fruit juice. Allow 1 lb. of sugar to 1 pint of juice. Bring slowly to the boil over a gentle heat, then boil fast until setting point is reached.

I can give you three essential points for preventing mould from forming on your jam. First, make sure all jam jars are scrupulously clean and sterilised, and, second, tie the jam down at once before any organisms can settle on it. Third, store in a cool, dry cupboard.

If you are mixing rhubarb jam this year, instead of flavouring it with ginger, try elder-flowers as a change. It gives it a delicate flavour, just like muscat grapes. As you know, rhubarb absorbs all flavours and gives none, so use it with the more expensive fruits in jams, jellies, and tarts. For instance, supposing you were using 4 lb. of rhubarb, you could add three sprays of elderflower, tied in muslin.

Many people find rhubarb too acid, and say they cannot take it because it gives them rheumatism. But try cooking it this way: wash and cut into short lengths, and bring to the boil in a saucepan of water. The moment it boils, remove it and strain off the water; with it goes all the acid. Now add sugar and a very little fresh water and stew slowly till it is soft. As a matter of fact, I always use golden syrup; it is a good substitute for sugar and it gives rhubarb an attractive honey flavour.

ANNE BEATON

THE GARDEN PATH

Stone paths in the garden often get cracked. and the holes get full of water in winter, and the children rick their ankles on them in the summer. To mend the cracks, clean out all the dirt with an old knife and wet the cracks thoroughly. Then, fill them up with a mixture of three parts sand and one part cement, with enough water to make it into a plastic mortar.

Notes on Contributors

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Crossword No. 1.164. Snakes and Ladders. By Twig

Prizes (for the first three correct solutions opened): Book tokens, value 30s., 21s., and 12s. 6d. respectively

Closing date: First post on Thursday, August 28

		X					Y		
A	B	C	D	E	F	G	Н	1	J
1									
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
8					8				
9					9				
10					10				

NAME	1		7-4
Address	 		
		190	

The diagram consists of two word ladders, the the diagram consists of two word ladders, the letters of each word being those of the next with one alteration, e.g., DONOR, RONDE, etc. A 'snake' on each ladder is clued to give one letter on each step. The clues to the steps are not given in order of entry. Punctuation should generally be ignored, and an accent omitted. It may be of some help to know that X1 is also Y10, and X10 is Y1.

SNAKE X

B1—D3. A good meal for Modestine (3). D3—B5. Scots river? Aye, it's Angus's (3). A6—D9. Select species (4).

SNAKE Y

G1—I3. Weed or promontory (3). I4—G6. Dagoba's conventionalised umbrella carried by most golfers (3).

G7-19. Invertebrate dodos confused. How trifling

- Foot wear once. 'Topping', said the Ensign.
 Pungent drug made of leaves from a gallows tree. All the shine and short weight are lost in the process.
- Enter debit here or money back.
 The —— of Tamburlaine and power of wars;
 Treasure trove. H's not hidden when unearthed.
 Enough rope for a Flemish composer's Italian
- 7. Make light of or remove. Due to the ferry-man a disorderly Brazilian
- composer loses his seat.

 9. Italian nickel? A sorry business from the look
- 10. Reformed Russian sable makes Ancient Greek
- May be detected in the printed index.
 Wind or twist together.
- 13. Sun god in heated reverse lays down the law.

- 14. American tripper backs the last in the race as
- usual.

 15. I him Imogen was slain.

 16. Down at heel, Press on, Lower extremities need attention.
- 17. Ditches the pilot, man overboard.
- 18. Cheers! Hail from right back in the Indian
- 19. Put off gambler loses 70 thrice.20. Some 'op-picker pronouncing the 'ouse might cause this effort of the lungs.

Solution of No. 1,162

Prizewinners: 1st prize: W. P. Till (Cheadle); 2nd prize: J. P. Titch-marsh (Edgware); 3rd prize: Mrs. N. Fisher (Stroud)



Acress: 1. (UN)G(DLL 5. BRE(VIER). 8. STEELER ST. AL(VIS. 16. (V)A(IR. 17. OSS(EIN). 19. (UN)R(I)PE. 25. (V)A(IR. 17. OSS(EIN). 19. (UN)R(I)PE. 25. OA(TEN). 26. APPERINE). 3. RA(VE. 38. (VIS(I)ON). 26. APPERINE). 3. RA(VE. 38. (VIS(I)ON). 26. APPERINE). 3. REPLANCE. 3. (VIS(I)ON). 37. (TEN)CH. 39. (VIS(I)ON). 38. REPLANCE. 38. (VIS(I)ON). 39. REPLANCE. 38. REPLANCE. 38. (VIS(I)ON). 39. (TEN)CH. 39. (VIS(I)ON). 39. (TEN)CH. 39. (VIS(I)ON). 39. (TEN)CH. 39. (VIS(I)ON). 39. (VISIN). 39. (VIS(I)ON). 39. (VISIN). 39. (VIS(I)ON). 39. (VISIN). 39. (VI

W(EIGHT)Y.

Down:

TRAN(SEPT).

CLEO(NINE).

4. L(1)(ONE)SS.

5. (VI)BE(X).

6. RUS(TRES).

7. (UN)EA(TEN).

8. SCTENTOR.

9. TEMP(TRES)S.

10. RAM(DE. II. (DLL(DS)TON.

12. (LLC)STON.

13. (UN)AA.

14. (TEN)SON.

15. (VIN) LO.

16. (LLC)STON.

16. (LLC)STON.

17. (LLC)STON.

17. (LLC)STON.

18. (LLC)

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